



## Medicines Evidence Commentary

commentary on important new evidence from Medicines Awareness Weekly

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### **Chronic disease in people with severe mental illness: reducing excess mortality**

**A meta-review of 16 systematic reviews looked at interventions to improve health and reduce mortality caused by chronic disease in people with severe mental illness. The authors concluded that antipsychotic and antidepressant medications may reduce mortality if the person adheres to their treatment. Interventions to improve lifestyle may be beneficial, but longer-term follow-up is needed. Healthcare professionals should manage the physical health of people with severe mental health illness, following recommendations in the NICE guidelines on [psychosis and schizophrenia](#) and [bipolar disorder](#).**

#### **Overview and current advice**

People with severe mental illness, including schizophrenia and schizophrenia-like disorders, bipolar disorder and severe affective disorders, have a shorter life expectancy compared with the general population. In the UK, men with severe mental illness die 8–15 years earlier and women 7–18 years earlier than those who do not have mental illness, and this gap in life expectancy is growing<sup>1</sup>. Although suicide is an important cause of death, the majority of preventable deaths are due to chronic conditions, mainly cardiovascular, cerebrovascular and respiratory diseases<sup>1</sup>. The side effects of antipsychotics, such as weight gain and impaired glucose tolerance, increase the risk of obesity and diabetes, subsequently increasing the risk of excess mortality. In addition, it has been suggested that people with severe mental illness may be less likely to receive timely and precise diagnosis because physical complaints are overlooked or attributed to psychiatric factors<sup>1</sup>.

As well as recommendations on pharmacological and psychological treatments for severe mental illnesses, NICE makes recommendations on improving physical health. The NICE guideline on [psychosis and schizophrenia in adults](#) states that people with psychosis or schizophrenia, especially those taking antipsychotics, should be offered a combined healthy eating and physical activity programme by their mental healthcare provider. The [guideline](#) recommends that people with psychosis and schizophrenia should have their weight and cardiovascular and metabolic indicators of morbidity routinely monitored, and that people who smoke should be offered help to stop. The NICE guideline on [bipolar disorder](#) makes recommendations on monitoring physical health in primary and secondary care settings, including a physical health check performed at least annually, covering cardiovascular disease, diabetes, obesity and respiratory disease.

The NICE Pathways on [psychosis and schizophrenia](#), [bipolar disorder](#) and [depression](#) bring together all related NICE guidance and associated products on these conditions in a set of interactive topic-based diagrams.

## New evidence

A meta-review of 16 [systematic reviews](#) of [controlled studies](#) looked at interventions to reduce the risk of mortality in people with severe mental illness<sup>1</sup>. However, just eight of these systematic reviews included mortality as an outcome whereas the other reviews included only physiological health outcomes (for example, body mass index, weight, glucose levels, lipid profiles and blood pressure). The total number of participants in the included reviews is not reported. All studies were published between 2007 and 2014. The quality of the included reviews was assessed using the [Assessment of Multiple Systematic Reviews](#) (AMSTAR) measurement tool. The AMSTAR tool is scored from 0 to 11: reviews scoring 9 or more are considered 'high quality', those scoring 6 to 8 are considered 'medium quality' and those scoring 5 or less are considered 'low quality'. The quality of the included reviews varied, with AMSTAR scores ranging from 3 to 11 (mean score of 9.1 across the 16 reviews).

Two systematic reviews looked at mortality-related outcomes associated with **antipsychotic and antidepressant medication**. One medium-quality review of 12 studies found an increased risk of mortality when people discontinued their antipsychotic medication, and when more than 1 antipsychotic was taken at a time (polypharmacy) compared with monotherapy (incremental [relative risk](#) [RR] 2.50, 95% [confidence interval](#) [CI] 1.46 to 3.40 per additional antipsychotic). A second, low quality review of 3 studies found conflicting evidence for the risk of mortality associated with selective serotonin reuptake inhibitor (SSRI) antidepressant use. A third high-quality systematic review of 2 studies did not find an association between long-term **cognitive behavioural therapy** and an increased risk of mortality in people with schizophrenia.

Ten systematic reviews looked at health outcomes associated with **lifestyle interventions** for people with severe mental illness. A high quality Cochrane review looked at interventions that gave general health advice to people with severe mental illness, including 2 studies that reported on all-cause mortality, which found no significant difference between the intervention and standard care (RR 0.98, 95% CI 0.27 to 3.56). Results from 9 reviews suggested that weight-loss interventions can achieve modest but statistically significant improvements in physical activity and eating habits (2 low, 4 medium and 3 high quality reviews). Overall, the authors concluded that lifestyle interventions can effectively reduce antipsychotic-induced weight gain and achieve weight loss in people who are already overweight.

The meta-review compared **methods for delivering care**, finding 2 Cochrane reviews (1 medium and 1 high quality) that evaluated health outcomes in people with severe mental illness who received integrative community care management (a multi-professional team-based approach to patient care) or intensive case management. Neither review found a statistically significant difference in risk of death for either care programme compared with standard care. No data were found on **screening and monitoring** of physical health parameters.

This meta-review of systematic reviews highlights the limited published information on reducing excess mortality caused by chronic disease in people with severe mental illness. It should be noted that there was considerable variation in the quality of the included systematic reviews, and long-term follow-up data for lifestyle interventions are lacking.

## Commentary

### Commentary provided by NICE

This meta-review was intended to be a comprehensive synthesis of the evidence on interventions that might reduce mortality from chronic disease in people with severe mental illness. Although 16 systematic reviews were included, the results for many of the interventions were equivocal and firm conclusions on the benefits and harms of the different interventions cannot be drawn.

The authors of this meta-review concluded that antipsychotic and antidepressant medication may have a protective effect on mortality, although this is subject to treatment adherence. The authors note that there have been a number of individual studies published after the searches were performed for the meta-review, which appear to support the benefits of long-term treatment and good adherence to psychiatric medication. The authors suggest that antidepressants and antipsychotics reduce the severity of psychiatric symptoms, leading to better health behaviours, such as reduced smoking and alcohol intake. However, comparison of long-term health outcomes is difficult because of [heterogeneity](#) in the drug classes, particularly for antidepressants, and the presence of underlying co-morbidities and risk factors for chronic disease. The authors also concluded that interventions to improve lifestyle may reduce a person's health risk profile, although the studies in this area are limited by short follow-up periods.

Although this meta-review failed to provide unequivocal, quantitative evidence supporting specific interventions to reduce mortality caused by chronic disease in people with severe mental illness, it reminds us of the need to appropriately manage the physical health of this group. A number of factors may increase the risk of mortality in people with severe mental illness, including weight gain and impaired glucose tolerance caused by psychotropic medication, and unhealthy lifestyles caused by the negative symptoms of mental illness. It is important that the physical health of people with severe mental illness is appropriately managed in line with the recommendations in the NICE guidelines on [psychosis and schizophrenia in adults](#) and [bipolar disorder](#).

## Study sponsorship

The funding source for the meta-review is not reported.

## References

1. Baxter AJ, Harris MG, Khatib Y et al. (2016) [Reducing excess mortality due to chronic disease in people with severe mental illness: meta-review of health interventions](#). The British Journal of Psychiatry DOI: 10.1192/bjp.bp.115.163170 (Epub ahead of print)

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