

# Multiple versus single risk behaviour interventions for people with severe mental illness: a network meta-analysis and qualitative synthesis

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## Plain English summary

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# Plain English summary

## Introduction

People with severe mental illness die, on average, 15–20 years earlier than the rest of the population.

Many of us are unhealthy in several ways. Does tackling multiple health risks together lead to greater benefit?

## Intervention benefits

This project reviewed 101 studies. Of these, 67 studies looked at the health benefits of interventions, and 34 studies asked about experiences of improving physical health. Just over half of these studies had important problems, so it may not be possible to trust their findings.

Most health improvements were small. For example, people who took part in an intervention lost 2 kg more weight than those who did not receive an intervention. This weight loss is in line with the general population, but the starting weight of people with severe mental illness is often greater.

Focusing on quitting smoking seems better than changing other behaviours (e.g. eating unhealthy food) at the same time. But more studies are needed.

No evidence was found that trying to improve physical health worsened the mental health of people with severe mental illness.

## Experiences of interventions

Interventions focused on promoting physical health. But people with severe mental illness preferred to manage mental and physical health together. People with severe mental illness should be more involved in future studies, as this would make the studies more relevant.

People with severe mental illness also valued interventions that considered their mental health condition.

## Limitations

Most studies looking at intervention benefits focused on weight and body mass index; few studies asked if people's behaviour changed. There was also a lack of overlap between studies interested in intervention benefits and experiences of interventions.

## Conclusions

Most health improvements were small. No evidence was found that people with severe mental illness trying to improve physical health made their mental health worse.

## **Future work**

More research is needed on adapting interventions for people with severe mental illness. We also need to see if people can maintain improvements long term. This may be difficult if people with mental health symptoms get worse or if they need to spend time in hospital.

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