



# Further evidence to support weight loss and lifestyle interventions for people taking antipsychotic medications

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**ABSTRACT FROM:** Green CA, Yarborough BJ, Leo MC, *et al.* The STRIDE weight loss and lifestyle intervention for individuals taking antipsychotic medications: a randomized trial. *Am J Psychiatry* 2015;172:71–81.

## WHAT IS ALREADY KNOWN ON THIS TOPIC

Increasing weight is the leading risk factor for many life-shortening illnesses such as cardiovascular disease, stroke and diabetes.<sup>1</sup> Individuals with serious mental illness (SMI) such as schizophrenia are at increased risk of medical comorbidities, including metabolic syndrome, leading to an increased risk for cardiovascular disease and diabetes. As a result, life expectancy is shorter than those in the general population.<sup>2</sup> The elevated cardiometabolic risks can be due to inadequate nutrition, limited access to medical care, sedentary lifestyle, smoking and treatments such as prescription of antipsychotic medications. Healthy lifestyle interventions developed specifically for people with mental illness are essential in the treatment and prevention of reduction of weight gain and risk of diabetes.

## METHODS OF THE STUDY

This study was a multisite parallel two-arm randomised controlled trial, recruiting participants in community mental health settings. Inclusion criteria for the study were age > 18 years, taking antipsychotic medications >30 days and body mass index (BMI) >27 kg/m<sup>2</sup>; exclusion criteria were pregnant and/or breastfeeding, recent psychiatric hospitalisation <30 days, bariatric surgery, history of cancer, heart attack or stroke and cognitive impairment. Participants (n=200) were recruited and randomly assigned based on medication use, diagnosis and BMI, then randomised to usual care or the STRIDE intervention. STRIDE participants met weekly for 2 h group meetings including 20 min of physical activity, food, sleep and activity record keeping for 6 months during the intervention phase and during the maintenance phase (6 months), the groups met monthly with telephone support. STRIDE intervention was designed to reduce weight and related risks through dietary changes, moderate caloric restriction and increased energy expenditure.<sup>3</sup> Data collection was blinded and included height, BMI, blood samples (lipid, triglyceride, total cholesterol levels, fasting glucose and insulin levels) and blood pressure. Data was collected at baseline, 6-month and 12-month intervals. Statistical analyses included generalised estimating equations, Wald tests, Pearson correlations, sensitivity analyses and comparison of intervention and control group using one-way analyses of covariance.

## WHAT DOES THIS PAPER ADD

- ▶ This paper demonstrates that people with well-established health-related risks such as obesity and elevated glucose levels can reap the benefits of lifestyle changes when enrolled in a specifically developed healthy lifestyle intervention such as STRIDE. The intervention group in this study lost 4.4 kg more than the control group at 6 months and were five times more like to lose >10% of their baseline weight. The intervention group showed a greater decline in fasting glucose levels compared with the control group.
- ▶ While this paper does not outline explicitly the costs of the intervention, the researchers planned to do a cost-utility analysis. Previous cost-effectiveness studies have shown elements of the STRIDE project to be efficient and cost-effective.<sup>4</sup>

## LIMITATIONS

- ▶ This study lacks long-term follow-up, which like other, studies would likely demonstrate greater benefits to physical health improvements.
- ▶ Group attendance was identified as a limitation by the authors, suggesting increasing the length of the intervention and number of sessions attended would likely demonstrate health improvements.
- ▶ Age and gender of participants was a limitation to generalisability of the study, participants with an average age of 47 years and women were over represented with only 28% of participants being male.
- ▶ Ethnically diverse populations are under-represented in the study with only 14% reporting they were members of racial or ethnic minority groups.

## WHAT NEXT IN RESEARCH

The success of the STRIDE intervention programme on weight loss and fasting glucose levels for the SMI population is of significance. This population bears the burden of increasing physical health problems along with longer lengths of stay in acute care settings, due to lack of available housing and support, with some people waiting up to 1 year in acute care facilities. Future research needs to focus on how the STRIDE programme can be initiated in acute settings? What are the barriers to implementation in an acute psychiatric setting and attendance? Can a healthy lifestyle programme be initiated in an acute care setting and continue in the community?

## DO THESE RESULTS CHANGE YOUR PRACTICES AND WHY?

Yes. The STRIDE programme offers clinicians easily understood manuals, guides and handouts that can be used to initiate lifestyle changes. The discrepancy between current practice and necessary practice can be changed by the use of the STRIDE programme materials. It is imperative that healthy lifestyle programmes like STRIDE are implemented as soon as possible. The reduced life expectancy of people with schizophrenia is significant; lifestyle interventions tailored for people with SMI can reduce weight and improve glucose metabolism. However, the barriers to introduce lifestyle interventions into usual practice urgently needs to be rectified.

**Competing interests** None declared.

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