Development of The Determinants of Metabolic Side Effects Questionnaire

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Plain English Summary (250 words max)

Background

Antipsychotic medicines are the main treatment for severe mental illnesses such as psychosis. They work well, but half of people taking them can develop 'metabolic side effects' like weight gain, high blood sugar and high cholesterol. These side effects raise diabetes and heart disease risk. The medicines change how people eat and how active they are. We needed to understand why so that people can be given the right support.

Aims

To understand what causes changes in eating and physical activity when people start an antipsychotic medicine.

Methods

We interviewed 20 people who take or have taken in the past, an antipsychotic medicine for a severe mental illness. We asked about their experiences of starting the medicine and how their eating and activity changed and why. Our Patient and Public Involvement group with lived experience guided the study and checked our findings.

Findings

People described feeling drowsy and low in energy, alongside intense hunger and cravings for sugary food. Cooking healthy meals and exercising felt much harder than before, so many people relied on unhealthy takeaways and convenience food. Money worries, low mood, comfort eating and unkind comments about weight made things worse. Support from friends and family, and free healthy-living programmes, helped, but this help often ended too soon.

Conclusion

People need tailored support with eating and physical activity from the moment an antipsychotic is prescribed, rather than after weight gain happens. Our findings show what that support needs to address and will be used to design it.

Technical Summary (250 words max)

Background

Antipsychotic medicines effectively treat severe mental illness, but up to 50% of people prescribed them develop metabolic side effects (MSEs), increasing cardiovascular disease and type 2 diabetes risk. Antipsychotics induce changes in eating and sedentary behaviour; the determinants of these behaviour changes are unknown.

Objectives

To describe experiences of starting an antipsychotic medicine and identify the behavioural determinants of developing antipsychotic-induced MSEs.

Methods

Semi-structured interviews were conducted with 20 adults prescribed an antipsychotic for severe mental illness, recruited through NHS mental health trusts, charities and a research database. Underpinned by the Theoretical Domains Framework (TDF), interviews explored eating and physical activity behaviours following antipsychotic initiation. Transcripts were analysed using template analysis. Data were coded inductively and themes mapped deductively to TDF domains. A Patient and Public Involvement group co-designed materials and member-checked findings.

Results

Five themes were mapped to TDF domains: environmental impact on eating and activity behaviours (Environmental Context and Resources); social influences on eating and physical activity (Social Influences; Reinforcement); emotional influences on self-image (Emotion); motivation around eating and exercise (Beliefs about Capabilities; Reinforcement; Skills); and impact of weight gain (Goals; Behavioural Regulation; Optimism). Sedation, intense hunger and cravings, emotional eating, negative social feedback and environmental barriers drove increased energy intake and reduced physical activity. Social support for exercise and structured healthy-living interventions were protective but time-limited.

Conclusions

The determinants identified provide:

- Targets for an intervention delivered at the point of antipsychotic initiation
- The evidence base for developing the Determinants of Metabolic Side Effects Questionnaire.