

## Summary

Schizophrenia is a chronic, debilitating mental disorder. On average, life expectancy is 15 years shorter for men and 12 years shorter for women than for the rest of the population. Factors such as smoking, alcohol/drug abuse, inadequate diet and lack of physical activity contribute to a high degree of coexisting conditions, such as type 2 diabetes and cardiovascular diseases.

### SBU's assessment of the state of knowledge

- A combination of behavioural measures to promote physical activity and healthy eating habits yields only a minor decrease in body weight and BMI, and a minor improvement in quality of life for persons with schizophrenia. There are no studies to determine whether this effect persists for more than twelve months. It is unclear whether the level of physical activity is affected.
- Behavioural measures to promote physical activity have a negligible effect on body weight and BMI, level of physical activity and quality of life for people with schizophrenia. There are no studies investigating only interventions to promote healthy eating habits.
- The smoking cessation drugs bupropion and varenicline increase abstinence in people with schizophrenia. However, there are no studies with follow-up of longer than six months' duration. The benefit of bupropion in reducing smoking in this group is unclear. While nicotine patches have proved effective in studies of smokers in the general population, there are far too few studies on people with schizophrenia to be able to assess the effect.
- People with schizophrenia who are dependent on or abuse alcohol use the alcohol drugs naltrexone, acamprosate, disulfiram and nalmefene. While these drugs have been shown to be effective in other patients who are dependent on or abuse

alcohol, there are too few studies on patients with schizophrenia to be able to draw any conclusions.

- There are no published studies of the cost effectiveness of behavioural measures to promote physical activity and a healthy diet, nor of drug treatment to promote abstinence and limit alcohol dependence and abuse.
- SBU's report from 2012 showed that the care of people with schizophrenia and schizophrenic conditions was in many ways inferior to that received by others, even though their need was at least as great. This patient group thus risks discrimination in terms of equal access to healthcare. The healthcare system should avoid allowing the problems caused by the disorder to impair access to or opportunities for other care, including help with lifestyle changes. Nor should people with schizophrenia be neglected in comparison with patient groups who are better able to assess their needs and seek healthcare.

### Questions and methodology

This report evaluates the effect and cost effectiveness of behavioural measures to promote physical activity and a healthy diet in adults with schizophrenia. It also evaluates the effect and cost effectiveness of drugs to promote abstinence and limit alcohol dependence and abuse in adults with schizophrenia. Ethical and social aspects are also taken into account.

The report is based on schizophrenia treatment guidelines from the United Kingdom published in 2014 by the National Institute for Health and Care Excellence (NICE) and on SBU's schizophrenia report from 2012. These have been supplemented by new literature searches. Study quality has been assessed using SBU's review templates. A few studies have been assessed differently by NICE and SBU, but there is agreement on the overall strength of the scientific evidence.

## Economic aspects

There are no published studies of the cost effectiveness of behavioural interventions to promote physical activity and a healthy diet, nor of pharmacological interventions to promote abstinence and limit alcohol dependence and abuse. Thus neither of these questions can be answered on the basis of scientific evidence. However, it should be noted that effective interventions, without serious side effects, could also be viewed as cost effective, because the long term consequences of poor physical health in people with schizophrenia are often costly. An important aspect of cost effectiveness is patient compliance. Partly because of the frequent side effects associated with many interventions, compliance is often low.

## Ethical aspects

Changing unhealthy habits and risk behaviours can be a difficult task. Interviews on such topics as physical activity, eating habits and smoking and alcohol consumption can be perceived as a breach of integrity. With schizophrenia, continuous antipsychotic treatment is a prerequisite for avoiding relapse. At the same time, antipsychotic drugs are associated with various side effects. For example, weight gain can appear within a few weeks of starting medication. Weight gain, as well as other side effects, can have an adverse effect on self-image and self-esteem and contribute to stigma and discrimination that may explain discontinuation of antipsychotic medication, leading to relapse and decreased function and quality of life.

Patient involvement in treatment decisions makes it possible to individualise therapeutic interventions and is thus an important factor for treatment outcome.

People with schizophrenia may find it difficult to take an active part in decisions about their own care. For this reason, healthcare personnel must undertake a careful evaluation of the patient's decision-making capacity, so that the decision-making process can be adapted to the individual case.

There is limited scientific evidence that behavioural measures to promote physical activity and a healthy diet are effective for weight reduction and improved quality of life. However it should be stressed that there are difficulties in conducting studies within the group in question: this should be taken into account when evaluating the implications of limited evidence in clinical practice. Limited scientific evidence, together with the experience of healthcare personnel in working with lifestyle changes in this group, can also create an attitude that the very attempt is a waste of healthcare resources. There is a risk that healthcare personnel may refrain from measures that could nevertheless benefit the individual.

### Project group

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Yellow report no 232

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