Schizophrenia and Cardiovascular Risk

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Background and aims

Schizophrenia (Scz) is one of the most debilitating mental disorders. Despite the improvements in mental health care services, these patients have a poor quality of life and a 20-year shorter life expectancy in contrast with the general population. The excess mortality and morbidity seen in this disease is largely due to natural causes, specifically cardiovascular diseases (CVD), rather than suicide. The prevalence of cardiovascular risk factors among these patients is high. Our aim is to explore what may influence this risk and the impact of preventive strategies.

Objectives

Identify the main cardiovascular risk among schizophrenic patients and potential tools for early diagnosis and prevention of CVD.

Material and Methods

Non-systematic literature review using the database *PubMed* and *Medline* with the keywords "schizophrenia", "cardiovascular risk", "cardiometabolic risk" and "heart disease".

Results

According to literature, common cardiovascular risk factors among Scz are related with the higher prevalence of hypertension, diabetes mellitus and dyslipidaemia, also connected with a suboptimal lifestyle pattern including physical inactivity, poor diet, smoking and alcohol abuse. The antipsychotic drugs may have adverse effects and also some shared genetics between CVD and Scz may contribute to this risk. The establishment of corrective measures focused on diet, lifestyle patterns and therapeutic effects show a significant improvement for the health of these patients.

Cardiovascular risk factors in Scz

- Diabetes Mellitus
- Hypertension
- Obesity
- Dyslipidaemia
- Physical inactivity/physical fitness
- Smoking
- Alcohol and drugs abuse
- Poor diet
- Decreased access to health care services
- Adverse effects of antipsychotic drugs
- Shared genetics between Scz and CVD risk factors

Preventive strategies		
Regular exercise programs	Compliance with medication	Stop alcohol /drugs intake
Smoking cessation/ avoid passive smoking / establish smoke-free zones in clinical and residential areas	Non-pharmacological weight-management programmes	Screen and monitoring health parameters

Recommended monitoring measures for cardio-metabolic risks in Scz

1. Blood pressure
2. Body Mass Index
3. Hip and waist circumference
4. Fasting triglycerides and cholesterol
5. High-density lipoprotein/low-density lipoprotein ratio
6. Fasting glucose
7. Diabetes symptoms

Conclusions

Most of the excess mortality is due to CVD rather than suicide, partly caused by modifiable risk factors, intimately related with their lifestyle, disparities in health access, clinical evolution and pharmacotherapy. The literature supports that lifestyle intervention programmes can have significant impact on cardiovascular risk. A multidisciplinary model of care should be created in order to manage chronicity, complexity and comorbidity providing the best tool for better health outcomes.

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