

Physical Health in Schizophrenia

Nadeem Mazi-Kotwal and Baljit Upadhyay

Authors:

Nadeem Mazi-Kotwal, MBBS, MRCPsych, Consultant Psychiatrist, South Essex Partnership Trust, Weller Wing, Bedford, UK

Baljit Upadhyay, MD, Core Trainee Year 2 in Psychiatry, South Essex Partnership Trust, Calnwood Court, Luton, UK

Correspondence:

Dr Nadeem Mazi-Kotwal, Consultant in Old Age Psychiatry, Weller Wing, Bedford Hospital, Ampthill Road, Bedford, MK.

Email: nadeem.kotwal@sept.nhs.uk

Tel: 01234 299915

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None

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Introduction

Schizophrenia contributes significantly to the global burden of disease. Whilst it is well known that schizophrenia is associated with increased mortality from suicide, it is less well known that the mortality and morbidity from other physical illnesses is higher in people with schizophrenia. Schizophrenia is associated with at least 20% reduction in the life expectancy and this may roughly equate to 20-25 years of lost life in developed countries. Of those living with schizophrenia in the community without substance misuse in UK, men experience 20.5 years reduced life expectancy and women 16.4 years reduced life expectancy. In people with schizophrenia, about 40% will attempt suicide and about 10-13% will end up committing suicide. A significant proportion of premature mortality is therefore not directly attributable to suicide, but can be linked to the co-morbid physical illnesses that exist with schizophrenia.

Although the biggest risk identified is from cardiovascular diseases, most of the major causes of death are elevated in schizophrenia compared to the general population. Many of these illnesses may go unnoticed and undiagnosed with the patients being unable to volunteer complaints to health care professionals.

A substantial mortality difference exists between people with schizophrenia and the general community (8,9). Schizophrenia is associated with a two-fold increase in death rates from cardiovascular disease, three-fold from respiratory disease and four-fold from infectious disease (6). Unfortunately, this gap has been widening further in the last few decades (6). Various meta-analyses report the 'All Cause Standardised Mortality Ratio' for people with schizophrenia to be between 1.5 and 1.6. Although there is clear evidence to suggest poor physical health and undiagnosed comorbidities contributing to mortality in schizophrenia, the potential to improve these health outcomes has not been embraced with enthusiasm in clinical practice. The general consensus is that much of the excess morbidity and therefore the subsequent mortality is preventable by early recognition and treatment of the physical comorbidity and lifestyle modifications.

Causes for physical comorbidity

People with schizophrenia have a higher prevalence of cardiovascular disease contributing to the mortality rates (10,11). In comparison to the general population, they are likely to make poor dietary choices, smoke and have less exercise (12). The increased risk factors may be a consequence of a

genetic association to the illness itself or as a response to changed lifestyle, behaviour or treatment.

Smoking: The prevalence of smoking in people with schizophrenia greatly exceeds that of the general population, even when similar or lower socio-economic classes are used for comparison (13). Smoking may induce hepatic enzymes, reducing the drug concentration and the adverse effects. Besides this, it has been postulated that nicotine may have some therapeutic effect explaining the increased smoking rates in schizophrenia.

Diet: Studies have demonstrated that people with schizophrenia make poor dietary choices, prefer a high fat diet and consume less vegetables (12). The dietary intake of people with schizophrenia may be as poor as the social class V, with the high fat content contributing further to dyslipidemia and weight gain.

Exercise: People with schizophrenia only take small amounts of exercise or none at all. Sedentary lifestyle, which is one of the strongest cardiovascular risk factors, and the lack of regular exercise may be attributable to the negative symptoms, sedation, amotivation and other factors. In contrast, exercise improves lipid profile, glucose tolerance, hypertension and also obesity.

Medication: Other risk factors for physical comorbidity, such as obesity, diabetes, metabolic syndrome, hyperlipidemia and hypertension, may be present as an association with schizophrenia or may arise as a result of treatment with antipsychotic medication.

Weight Gain: Weight gain and obesity are recognised adverse effects of antipsychotics. Weight gain itself predisposes people to the development of hypertension, atherosclerosis, diabetes mellitus, cardiovascular disease and stroke. Clozapine and olanzapine are associated with the greatest weight gain and the mean weight gained may be around 6 kg. This remains a common reason for non-compliance.

Lipids: Hypertriglyceridemia is another recognised risk factor responsible for comorbidities in schizophrenia. There may be an association between weight gain and hypertriglyceridemia, but medication such as olanzapine and clozapine can directly increase the lipid levels by mechanisms that are not yet clearly understood (14).

Diabetes: Hyperglycemia and diabetes are further complications that may increase the morbidity and mortality of schizophrenia. Although the weight gain with antipsychotic drugs has been portrayed as the greatest risk factor for developing diabetes in schizophrenia, atypical antipsychotic drugs may contribute more directly, even in the absence of weight gain. Other factors may include lifestyle, diet, and a genetic predisposition to have hyperglycaemia even in the absence of antipsychotics.

Hyperprolactinemia: Prolonged hyperprolactinemia due to antipsychotics (mainly typicals) may result in osteoporosis (15), amenorrhoea or reduced sperm counts.

Barriers to physical health care

People with schizophrenia are often of lower socioeconomic status, stigmatised, vulnerable and struggle to access health care resources. A person with predominant negative symptoms may find it difficult to seek help and advice due to amotivation, alogia and asocialisation. They may be less able or willing to articulate their concerns, seek help or keep appointments. Equally, ensuring compliance with the prescribed treatment plan may prove to be a challenge.

There are a number of studies to suggest that psychiatrists and general practitioners struggle to diagnose and treat physical ailments in the psychiatrically ill (16,17). Being aware of a diagnosis of mental disorder, doctors may wrongly presume a genuine physical health complaint as being psychological in origin. The stigma of having a mental illness may prevent access to an appropriate treatment (17,18). Physicians may be uncomfortable in dealing with a person who has schizophrenia or may lack the skills to engage appropriately, affecting the outcome of the clinical review (1). A lack

of clarity about the roles and responsibilities of the secondary care specialist and the primary care services may lead the issues to be seen as “somebody else’s problem”. Close interaction and liaison between the psychiatrist and other treating teams may be necessary when dealing with medicolegal issues such as assessment of capacity.

What can be done

There are huge gaps between the mortality rates for people with schizophrenia and the general population and unfortunately, the gap has been widening further (6), causing at least a 20% reduction in the life expectancy (4). The physical healthcare needs of this vulnerable, stigmatised and disenfranchised group of individuals are not being met and when health care is being offered, the quality of care provided is often inferior to what is available to the rest of the population (19,20).

Changing current practice requires education of primary care doctors, secondary care physicians and the patients themselves. It is the general perception that most of the mortality and morbidity figures can be improved with lifestyle education, early recognition and treatment of the physical illnesses. However initiating these changes may be difficult and financial incentives for clinicians actively to seek out opportunities to monitor these vulnerable patients should be considered.

Further research is needed, not only to gain a better understanding of the physical health care needs of people with schizophrenia, but also to develop models of care that will be more effective and allow easier access for patients. Active research aimed at optimising physical health and reducing mortality in schizophrenia should be prioritised and undertaken with urgency. Equally, there should be a drive towards facilitating more research into medications that have less metabolic and cardiovascular adverse effects.

There can be no substitute for better liaison and cooperative work between primary and secondary care clinicians with greater clarity of roles, preferably in a ‘Shared Care’ setting, striving to ensure that the physical health care needs of the people with schizophrenia are given the priority they deserve. The aim should be to bring the mortality and morbidity levels in people with schizophrenia down to those of the general population.

GP comment

What have I learned from this paper?

1. Morbidity and mortality rates are much higher in people with schizophrenia than in the general population.
2. The reasons for poorer health in people with schizophrenia are complex; although adverse effects from medication can play a role, this is not the only factor.
3. This paper provides ample justification for the comprehensive physical health checks that GPs undertake as a part of the Mental Health Indicators of the Quality and Outcome Framework, at which issues of smoking, obesity, hypertension and cardiovascular risks can be assessed, as well as encouragement of uptake of other health screening.

John Kedward
GP, Bedford.

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