

Editorial

Physical Health and Physical Health Care in Persons with Schizophrenia

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The issue of physical health and physical health care in persons with schizophrenia is emerging as a priority worldwide from the clinical, public health and ethical viewpoints¹. If we are really concerned about the quality of life of our patients with schizophrenia and the protection of their civil rights, we cannot ignore that physical health is a crucial dimension of quality of life in these people and that access to physical health care of the same quality as that available to the rest of the population is a basic right of these people as human beings and as citizens.

In this paper, I briefly review the research evidence showing the magnitude of the problem, the factors which contribute to generate the problem, and what can be done to address the problem.

Increased morbidity and mortality due to physical illness in people with schizophrenia

The prevalence of several physical diseases is increased in people with schizophrenia compared to the general population. In a study carried out in the US² people with psychotic disorders were found to be more likely than other people to develop diabetes, hypertension, heart disease,

asthma, gastrointestinal disorders, skin infections, malignant neoplasms and acute respiratory disorders. The rate was increased even when only patients without a concomitant substance use disorder were considered.

Mortality due to physical illness is significantly increased in people with schizophrenia. In a follow-up study carried out in the UK³, the standardized mortality ratio for natural causes in people with schizophrenia was 232, i.e. mortality due to natural causes was more than two-fold increased with respect to the general population. The standardized mortality ratio for causes "avoidable by appropriate treatment" was 468, i.e. mortality due to avoidable causes was more than four times higher than in the general population. The highest standardized mortality ratios were those for endocrine diseases (including diabetes mellitus), nervous diseases (including epilepsy), respiratory diseases, circulatory diseases and digestive diseases.

People with schizophrenia seem not to have benefited from the recent favourable trends concerning mortality due some physical diseases. In a longitudinal study conducted in Australia⁴ a steady decline in the mortality rate due to ischemic heart disease was observed in the general

population during the period from 1980 to 1998, dropping from 209 to 143 per 100,000 person-years in men and from 139 to 117 in women. In contrast, the mortality rate remained approximately constant in male psychiatric patients (on average 280 per 100,000 person years) and increased from 153 to 234 in female psychiatric patients.

Similar findings have been reported by a study carried out in Sweden, according to which mortality due to cardiovascular causes increased 4.7-fold in men and 1.9-fold in women with schizophrenia compared to the general population between 1976 and 1995⁵.

The gap between people with schizophrenia and the general population concerning mortality due to natural causes is more pronounced in developed than in developing countries⁶.

Reduced access to and quality of physical health care in people with schizophrenia

The access of people with schizophrenia to physical health care is reduced with respect to the general population. In the above-mentioned study conducted in Australia⁴, the standardized mortality ratio for ischemic heart disease was found to be 1.78 in men with schizophrenia compared with the general population. However, the standardized hospital admission ratio for that disease was remarkably decreased in both males and females with schizophrenia compared with the general population. Moreover, both men and women with schizophrenia were more than three-fold less likely to receive revascularization procedures than the general population.

Analogously, in a recent prospective study carried out in the UK (7), cardiovascular and respiratory symptoms (angina, phlegm production, wheeze and breathlessness) were found to be significantly more frequent in people with schizophrenia than in the general population, but the mean general practitioner (GP) attendance rate was less than half in people with schizophrenia than in the general population (2.3 versus 4.8 consultations per year). In a study carried out in the US⁸, a diagnosis of schizophrenia was significantly associated with a lower number of medical visits in the whole patient group as well as in the subgroups of patients with diabetes and hypertension.

The quality of physical health care received by patients with schizophrenia is worse than the general population. A recent study conducted in the US⁹ found that adverse events during medical and surgical hospitalizations were all significantly more frequent in patients with schizophrenia than in the other people, including infections due to medical care, post-operative respiratory failure, post-operative deep venous thrombosis or pulmonary embolism, and post-operative sepsis. All these adverse events were associated with significantly increased odds of admission to an intensive care unit and of death.

Factors explaining the increased morbidity and mortality due to physical illness in people with schizophrenia

The increased morbidity and mortality due to physical illness in people with schizophrenia is first of all related to the increased prevalence in these people of several risk factors for cardiovascular,

metabolic and respiratory diseases, the most important of which are obesity, smoking, and alcohol and drug abuse.

In a study carried out in the UK⁷ people with schizophrenia were significantly more likely to be obese (body mass index higher than 30) and morbidly obese (body mass index higher than 40) than the general population. The relevant figures were 35.0% versus 19.4% and 3.7% versus 1.3%. When these figures were broken down by age and sex, 28.7% of men with schizophrenia aged between 18 and 44 years were obese compared with 13.6% in the general population, and 3.7% versus 0.4% were morbidly obese. Even more striking, were the figures concerning women of the same age: 50.6% versus 16.6% and 7.4% versus 2.0%.

In a meta-analysis of worldwide studies¹⁰ a highly significant association between schizophrenia and current smoking has been confirmed: the weighted average odds ratio was 5.9; it was 7.2 in males and 3.3 in females. The association remained significant when severe mentally ill controls were used (odds ratio=1.9). Heavy smoking and high nicotine dependence were also more frequent in people with schizophrenia than in the general population.

In the Epidemiological Catchment Area study¹¹ the lifetime prevalence of alcohol abuse or dependence in people with schizophrenia was 33%, 3.3 times higher than in the general population, whereas the lifetime prevalence of illicit substance abuse disorder was 27.5%, 6 times higher than in the general population.

Patients with schizophrenia have been also reported to make poorer dietary choices

and to be less physically active than the general population¹².

A second factor contributing to the increased physical morbidity in people with schizophrenia is the impact of antipsychotic treatment. Of special concern is the increased likelihood of people receiving new-generation antipsychotics to develop obesity, type II diabetes mellitus and hyperlipidemia. A meta-analysis¹³ estimated that the mean weight gain in patients receiving standard doses of antipsychotics over a 10-week period was 4.45 kg with clozapine, 4.15 kg with olanzapine, 2.92 kg with sertindole, 2.10 kg with risperidone and 0.04 kg with ziprasidone. A study based on a large Veterans Administration Database in the US (14) found a significantly higher risk for diabetes among patients taking Clozapine (odds ratio=1.25), Olanzapine (odds ratio=1.11) and Quetiapine (odds ratio=1.31), but not Risperidone (odds ratio=1.05), compared with patients receiving first-generation antipsychotics. In a UK study¹⁵ patients receiving Olanzapine had an increased risk of developing hyperlipidemia compared to patients not receiving antipsychotics (odds ratio=4.65) and patients receiving first-generation antipsychotics (odds ratio=3.36).

Factors explaining the reduced access to and quality of physical health care in people with schizophrenia

The decreased access of people with schizophrenia to medical services has been related to several factors concerning the health care system. Well documented is the impact of lack of insurance and cost of care. In a study carried out in the US¹⁶

people with mental disorders were twice as likely than those without mental disorders to have been denied insurance because of a pre-existing condition (odds ratio=2.18). Having a mental disorder conferred a greater risk of having delayed seeking care because of cost (odds ratio=1.76) and of having been unable to obtain needed medical care (odds ratio=2.30).

Even when people with schizophrenia are seen by a doctor, their physical diseases often remain undiagnosed. In a study carried out in the US¹⁷ the percentage of cases of major physical illness which were not diagnosed by physicians other than psychiatrists was 33% among men and 31% among women, whereas the percentages of cases not diagnosed by psychiatrists were respectively 46% and 49%. Primary care providers may misperceive the medical complaints of psychotic patients as “psychosomatic”, be unskilled or feel uncomfortable in dealing with this population. An underlying stigmatization against people with severe mental illness may be involved. Moreover, during hospitalizations in medical and surgical wards, health care professionals may not be experienced in dealing with the special needs of patients with schizophrenia, may minimize or misinterpret their somatic symptoms, and may make an inappropriate use of restraints or sedative drugs, or fail to consider possible interactions of psychotropic drugs with other medications⁹. On the other hand, many psychiatrists are unable or unwilling to perform physical and even neurological examinations or are not up-to-date on the management of even common physical diseases.

The under diagnosis of physical diseases in people with schizophrenia may also be in part related, however, to patient factors. Psychotic patients may be reluctant to seek medical help, because they are unaware of any physical health problem, socially isolated, cognitively impaired or suspicious¹⁸⁻¹⁹. They may be less able to communicate clearly about their medical problems: a study carried out in the US²⁰ found that only 23% of consecutive patients admitted to the acute medical care unit of a psychiatric hospital could adequately describe the nature or location of their pain or illness. Patients with schizophrenia who have been diagnosed with a medical condition may not be able to describe it, or even remember it, at a later date: in the above-mentioned study²⁰, only 14% could name at least one of their physical problems two years after diagnosis. Moreover, it is well documented that the threshold for pain is increased in people with schizophrenia, which may be a further reason why some medical conditions are not diagnosed²¹ for instance, 79% of patients with schizophrenia with an acute perforated ulcer and 63% of those with acute appendicitis reported pain, compared with 95% of people without schizophrenia. Even more common seems to be the lack of pain in people with schizophrenia having myocardial infarction: only 18% of these people report pain during a heart attack, compared with 90% of those in the general population^{18, 21}.

What can be done to address this situation?

In order to address this situation, the first step is raising awareness of the problem among mental health care professionals, primary care providers, patients with

schizophrenia and their families. How many of these people have ever been told that "The excess risk of heart disease rather than the excess risk of suicide is the leading killer of people with mental illness"⁴. Certainly very few, is the available research information about the increased morbidity and mortality due to physical illness in people with schizophrenia should be appropriately disseminated.

Education and training of mental health professionals and primary care providers is a further essential step. Mental health professionals should be trained to perform at least basic medical tasks. They should be educated about the importance of recognizing physical illness in people with severe mental disorders, and encouraged to familiarize themselves with the most common reasons for under diagnosis or misdiagnosis of physical illness in these people. On the other hand, primary care providers should overcome their reluctance to treat people with severe mental illness, and learn effective ways to interact and communicate with them: it is not only an issue of knowledge and skills, but most of all one of attitudes.

Another essential step is the development of an appropriate integration between mental health and physical health care. There is some debate in the literature about who should monitor physical health in people with schizophrenia. However, the crucial point is that there should always be "somebody" in charge of this problem (i.e. a well-identified professional should be responsible for physical health care in each patient). Mental health services, on the other hand, should be able to provide at least a standard routine assessment of their patients, to identify or at least suspect the

presence of physical health problems. Currently available guidelines about the management of patients receiving antipsychotic drugs should be known and applied by all mental health services. Patients themselves should be involved as much as possible: for instance, mental health professionals should encourage patients to monitor and chart their own weight. Dietary and exercise programs should be routinely provided by mental health services. Flexible smoking cessation programs, which have shown some degree of success²² could be considered in some settings.

Finally, further research in this area is badly needed. Physical illnesses should not be always regarded as confounding variables in studies dealing with schizophrenia. Physical comorbidity should be studied systematically, so that the interaction between schizophrenia and physical illness in inpatients as well as in outpatients, in women as well as in men, and in young people as well as in the elderly can be better understood.

In conclusion, the promotion of physical health care in people with schizophrenia is today a key issue in our field. If we do not regard it as a priority, we will not be able to state convincingly that a better quality of life and the protection of the civil rights of our patients is really what we are looking for.

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