Excess Mortality From Chronic Physical Disease in Psychiatric Patients—The Forgotten Problem

Stephen Kisely, MD, PhD


Physical and psychiatric symptoms often occur together. In both hospital and primary care the presence of one leads to a worse outcome in the other. For instance, physical illness has a large, immediate effect on depressive symptoms, while further depressive symptoms are associated with increased subsequent physical morbidity. Among all outcomes, it is the increase in mortality that is of most concern. The death rate for people with mental illness is around 70% higher than for the rest of the population, even after adjusting for demographics, including socioeconomic status. In the case of schizophrenia, the risk is considerably greater. Patients with major mental illnesses, such as schizophrenia, and major depressive, bipolar, and delusional disorders, can die up to 25 years earlier than the general population. Contrary to common perception, it is not suicide that accounts for most of these deaths among people with mental illness, but common diseases such as heart disease, cancer, and chronic lung disease. Excess mortality from these diseases is 10 times that of deliberate self-harm yet receives little attention when compared with suicide prevention. Nova Scotian data suggest that while 100 people a year will die of suicide, an additional 1000 people with psychiatric illness will die of preventable physical disease than would be expected if their mortality risk was the same as the general population. This represents about 33,000 potentially preventable deaths for Canada annually.

The first In Review paper in this issue, by Dr David Lawrence, me, and Ms Joanne Pais, examines in detail the scale of the problem. Even though the risk of mortality is greatest for people with severe mental illness, such as schizophrenia, in terms of absolute figures, 72% of excess deaths occur in patients who have only ever attended general practice for their psychiatric care. This is therefore an issue for all clinicians, not just those in mental health settings. It had been thought that the increased mortality noted in earlier papers might be explained by overcrowding or poor levels of medical care in large institutions. With the move to treatment in the community, this cannot be the explanation now. Further, the disparity in the mortality risk between people with mental illness and the general population has actually increased during the last 20 to 30 years.

What are the possible explanations? In part, psychiatric patients have not benefited from preventative measures that have reduced the incidence of chronic disorders such as cardiovascular disease in the general population. Although many of the risk factors for cardiovascular disease, cancer, and other major natural causes of death, such as smoking, obesity, and hypertension, are potentially modifiable, people with mental disorders appear to miss out on appropriate preventative care. For instance, patients with severe mental illness are less likely to be assessed or treated for hypertension or hyperlipidemia in ambulatory and primary care. This is despite higher consultation rates with family physicians among people with severe mental illness, compared with those of the general population. The issue may therefore not always be the quantity of care, but also its quality.

Tobacco is a case in point. Up to 80% of patients with chronic schizophrenia smoke. Nevertheless, clinicians may be missing opportunities to help psychiatric patients quit, even though there are effective treatments available. In a survey of patients admitted to a smoke-free psychiatric unit, nicotine replacement therapy was only prescribed in just over one-half of the smokers, even though they showed evidence...
of nicotine withdrawal. Less than 1% were encouraged to stop smoking, referred for a formal cessation program, or provided with nicotine replacement therapy on discharge. Among outpatients, psychiatrists are less likely to offer smoking cessation counselling than family physicians. Psychiatrist patients receive cessation counselling in only 12% of visits to a psychiatrist, compared with 38% of primary care contacts.

Closer to home, psychiatrists may consider the medical care of their patients to be beyond the scope of their care. Some may also be reluctant to perform general physical examination of their patients, fearing that this would disrupt the therapeutic relationship. Two-thirds of psychiatrists have never physically examined their patients. Only 8% of psychiatric outpatients receive a physical examination.

However, as Dr Lawrence, Ms Pais, and I highlight, lifestyle, with factors such as smoking, is not the sole explanation. The incidence of many cancers is no higher than the general population, while mortality is greater. If lifestyle were the sole cause, incidence should more closely match mortality. Less data are available for other disorders such as cardiovascular disease; however, they share many of the same risk factors such as obesity, tobacco, and alcohol. If people are no more likely to develop a disorder, but are more likely to die of it, this suggests increased case fatality and possible issues around treatment. Lastly, psychiatrists need to be aware of the potential risks of psychotropic medications when selecting therapy, and that these are greatest in the initial years of treatment.

Patient-based explanations could include lower compliance with treatment, problems with communication, or difficulties in giving informed consent. But there may also be issues for providers. It may be that chronic physical disease may be more difficult to spot in some patients with a preexisting psychiatric condition, given symptom overlap. Somatic complaints such as poor appetite, weight loss, or decreased energy may have both psychiatric and physical causes. Access to treatment may also be a possible explanation for increases in case fatality. For example, psychiatric patients are more likely to die of disorders such as cardiovascular diseases, but are less likely to receive the appropriate treatment such as cardiac catheterization or coronary artery bypass grafting.

The companion In Review paper, by Dr Chris J Bushe and Dr Richard Hodgson, further explores the complexity of the problem in relation to cancer. For instance, there is a lower risk of lung cancer than expected when incidence is adjusted for smoking rates. Further evidence of a protective effect of schizophrenia against cancer derives from the reduced risk of death in patients with mental illness.

In addition, mental health service facilities need to provide physical examination facilities, including basic items such as blood pressure monitors and stethoscopes. Refresher training in the detection, management, and prevention of chronic medical conditions should be regularly provided for mental health clinicians. This could be complemented by guidelines for managing physical health, such as those of the American Diabetes Association and others. Certain high-risk groups should be targeted, such as patients with severe mental illness and those receiving atypical antipsychotics. In the longer term, under- and postgraduate training programs should give more emphasis to the physical and psychological problems of psychiatric patients.

One in 5 Canadians has a psychiatric disorder and so the increased mortality rate in this population is a major public health concern. Should this be a priority for the Mental Health Commission of Canada?

References
2. Lawrence D, Jablensky AV, Holman CD. Preventable physical illness in people with mental illness. Perth (AU): University of Western Australia; 2001.
The Canadian Journal of Psychiatry, Vol 55, No 12, December 2010

Books Received

The following books have been received; the courtesy of the sender is acknowledged by this listing. Books of particular interest to readers of The Canadian Journal of Psychiatry will be reviewed by selected reviewers. Not all books are available for review.

**Spirituality and Psychiatry.** Chris Cook, Andrew Powell, Andrew Sims, editors. London (GB): RCPsych Publications (The Royal College of Psychiatrists); 2009. 300 p. £25.00.


**Nidotherapy: Harmonising the Environment With the Patient.** Peter Tyrer. London (GB): RCPsych Publications (The Royal College of Psychiatrists); 2009. 98 p. £10.00.


1. **Excess Mortality From Chronic Physical Disease in Psychiatric Patients--The Forgotten Problem.**  
   Subjects: MENTALLY ill; MORTALITY  
   Database: Health Source: Nursing/Academic Edition

   PDF Full Text (319KB)

2. **Books Received.**  
   Subjects: BIBLIOGRAPHY (Documentation); PSYCHIATRY  
   Database: Health Source: Nursing/Academic Edition

   PDF Full Text (108KB)

3. **The Epidemiology of Excess Mortality in People With Mental Illness.**  
   By: Lawrence, David; Kisely, Stephen; Pais, Joanne. *Canadian Journal of Psychiatry*, Dec2010, Vol. 55 Issue 12, p752-760, 9p, 1 Diagram, 1 Graph  
   Subjects: MENTAL illness; MENTALLY ill; EPIDEMIOLOGY; CARDIOVASCULAR system -- Diseases; LITERATURE reviews; RESPIRATORY organs -- Diseases; MORTALITY  
   Database: Health Source: Nursing/Academic Edition

   ![Diagram](image1.png) ![Graph](image2.png)

   PDF Full Text (6.3MB)

4. **Schizophrenia and Cancer: In 2010 Do We Understand the**
Connection?
Subjects: SCHIZOPHRENIA; CANCER -- Mortality; DISEASE incidence; EPIDEMIOLOGY; SMOKING -- Health aspects; TOBACCO -- Physiological effect; CARDIOVASCULAR system -- Diseases -- Mortality
Database: Health Source: Nursing/Academic Edition

PDF Full Text  (695KB)

5. The Relation Between Disease Severity and Cost of Caring for Patients With Alzheimer Disease in Canada.
By: Herrmann, Nathan; Tam, Derrick Y.; Balshaw, Robert; Sambrook, Robert; Lesnikova, Nadia; Lanctôt, Krista L.. Canadian Journal of Psychiatry, Dec2010, Vol. 55 Issue 12, p768-775, 8p, 1 Chart, 2 Graphs
Subjects: CANADA; ALZHEIMER'S disease -- Treatment; MEDICAL care, Cost of; AMBULATORY medical care -- Utilization; SEVERITY of illness index; CAREGIVERS
Database: Health Source: Nursing/Academic Edition

PDF Full Text  (5.1MB)

6. Time Trends in Mortality Associated With Depression: Findings From the Stirling County Study.
By: Murphy, Jane M.; Gilman, Stephen E.; Lesage, Alain.; Horton, Nicholas J.; Rasic, Daniel; Trinh, Nhi-Ha; Alamiri, Bibi; Sobol, Arthur M.; Fava, Maurizio; Smoller, Jordan W.. Canadian Journal of Psychiatry, Dec2010, Vol. 55 Issue 12, p776-783, 8p, 5 Charts
Subjects: WESTERN Australia; DEPRESSION, Mental; SMOKING -- Health aspects; ALCOHOL -- Physiological effect; MORTALITY; CIGARETTE smokers
Database: Health Source: Nursing/Academic Edition

Show all 5 images
7. **Anxiety Disorders Among Offenders With Antisocial Personality Disorders: A Distinct Subtype?**


Subjects: PRISON psychology; PRISONERS -- Mortality; ANXIETY disorders; ANTISOCIAL personality disorders; COMORBIDITY; PRISONERS -- Health & hygiene

Database: Health Source: Nursing/Academic Edition

8. **Pharmacoepidemiology of Benzodiazepine and Sedative-Hypnotic Use in a Canadian General Population Cohort During 12 Years of Follow-up.**


Subjects: CANADA; BENZODIAZEPINES; PHARMACOEPIDEMIOLOGY; FOLLOW-up studies (Medicine); SEDATIVES; HYPNOTICS

Database: Health Source: Nursing/Academic Edition

9. **Propriétés psychométriques de la version française de l'inventaire de sentiment de culpabilité. (French)**


Subjects: CHRONOTHERAPEUTICS for Affective Disorders: A Clinician's Manual for Light & Wake Therapy (Book); BOOKS -- Reviews; TERNAN, Michael; WIRZ-Justice, Anna; BENEDETTI, Francesco; AFFECTIVE disorders -- Treatment; NONFICTION

Database: Health Source: Nursing/Academic Edition

![Image](https://example.com/image1.png)

PDF Full Text  (708KB)


Subjects: HISTORY of the Introduction of Lithium Into Medicine & Psychiatry: Birth of Modern Psychopharmacology 1949 (Book); BOOKS -- Reviews; SCHIOLDANN, Johan; LITHIUM -- Therapeutic use; NONFICTION

Database: Health Source: Nursing/Academic Edition

![Image](https://example.com/image2.png)

PDF Full Text  (708KB)
12. **Re: Reduction in Psychiatry and Psychiatry and Neuroscience.**
   Subjects: LETTERS to the editor; PSYCHIATRY
   Database: Health Source: Nursing/Academic Edition

13. **Reduction in Psychiatry and Psychiatry and Neuroscience.**
   Subjects: LETTERS to the editor; PSYCHIATRY
   Database: Health Source: Nursing/Academic Edition
### The Canadian Journal of Psychiatry

**Title Details**

<table>
<thead>
<tr>
<th>Basic Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
</tr>
<tr>
<td><strong>ISSN</strong></td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
</tr>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Start Year</strong></td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td><strong>Language of Text</strong></td>
</tr>
<tr>
<td><strong>Refereed</strong></td>
</tr>
<tr>
<td><strong>Abstracted / Indexed</strong></td>
</tr>
<tr>
<td><strong>Serial Type</strong></td>
</tr>
<tr>
<td><strong>Content Type</strong></td>
</tr>
<tr>
<td><strong>Format</strong></td>
</tr>
<tr>
<td><strong>Website</strong></td>
</tr>
<tr>
<td><strong>Email</strong></td>
</tr>
<tr>
<td><strong>Description</strong></td>
</tr>
</tbody>
</table>

### Subject Classifications

### Additional Title Details

### Publisher & Ordering Details

**Commercial Publisher**

- **General**
  - Canadian Psychiatric Association
  - Address: Suite 701 - 141 Laurier Ave West Ottawa ON K1P-5J3 Canada
  - Phone: 613-234-2815
  - Fax: 613-234-9857
  - Website: [http://www.allenpress.com](http://www.allenpress.com)

**Corporate Author**

- **General**
  - Canadian Psychiatric Association

### Price Data

### Online Availability

### Other Availability

### Demographics