



Schizophrenia Prevalence

Overview

The prevalence rates, service needs, and social impacts of an illness are often key factors in determining how much funding is allocated for the treatments and service levels for that illness. The worldwide lifetime¹ prevalence rate is typically estimated to be 1% for schizophrenia and 4% for psychotic disorders more broadly.²

Prevalence rates reported within Canada generally align with the standard 1% rate with the Canadian Chronic Disease Surveillance System (CCDSS) reporting a 1.1% annual prevalence rate for schizophrenia in BC and an annual prevalence rate of 0.9% for Canada overall.³ However, some authorities have cited much lower rates, such as the 0.25% to 0.64% range reported by the National Institute of Mental Health for the lifetime prevalence of schizophrenia and related psychotic disorders in the United States⁴ and a 0.55% annual prevalence rate for schizophrenia spectrum disorders reported in a 2023 BC study.⁵

Lower estimates of schizophrenia prevalence rates need to be considered with caution due to the high likelihood of underreporting. This can be due to a narrow definition of the illness, the nature of the illness, exclusion of key populations, and the methodologies used in studies. A 2023 US study, [Mental and Substance Use Disorders Prevalence Study](#) (MDPS), addressed many of these concerns and reported a lifetime prevalence rate of 1.8% for schizophrenia disorders.⁶

Based on both Canadian and international studies and the general underreporting of schizophrenia, the BC Schizophrenia Society (BCSS) recommends adopting 1.8% as the schizophrenia prevalence rate for service planning, with the understanding that the rate may well be higher.

Rationale

An important source for estimating prevalence rates in Canada and BC is the CCDSS. This is a network of provincial and territorial surveillance systems supported by the Public Health Agency of Canada (PHAC). The CCDSS data is derived from the health insurance registry databases in each province and territory, which are linked to the physician billing and hospitalization databases with health card numbers used as unique personal identifiers.⁷

As noted above, the CCDSS has reported 1.1% and 0.9% as the annual prevalence rates for BC and Canada, respectively. However, the CCDSS acknowledges that their data “are based on people with diagnosed schizophrenia who had contact with the health system during the data collection period, which may underestimate the total number of people diagnosed with schizophrenia during a lifetime.”⁸

The likelihood of underreporting schizophrenia prevalence rates based on health system contacts is high since many people with schizophrenia may not have a diagnosis or seek treatment. Studies have suggested that 40% of people with schizophrenia are untreated in any given year.⁹

This may be due in part to people’s inability to recognize that they have the illness and to negotiate reality, known as anosognosia, which is estimated to affect between 50% and 98% of people with schizophrenia.¹⁰ Therefore, it is likely that many people with schizophrenia may not have a diagnosis or seek services from the health system. Even people who have a diagnosis and access to health services may be excluded, depending on the reason for a person’s contact with the health system. The nature of mental disorders can also lead to underreporting when studies are based on self-reporting and non-clinical interviews.¹¹

Underreporting can be further exacerbated based on the populations and services that are included. For example, reporting based on health service contacts may be limited based on the type of service and physician billing (e.g., hospital vs. mental health center). Underreporting can be even more significant when populations that are more likely to be afflicted by schizophrenia and other psychosis disorders are excluded, such as people in psychiatric hospitals, prisons, and homeless shelters.¹²

The 2023 MDPS addressed these concerns in three ways: considering all schizophrenia spectrum disorders (schizophrenia, schizoaffective disorder, and schizophreniform disorder), which have similar treatment and support service needs; including people in psychiatric hospitals, prisons, and homeless shelters; and utilizing clinical interviews to identify schizophrenia cases more accurately.¹³

The MDPS reported:

- approximately 1.8% of adults aged 18 to 65 had a lifetime history of schizophrenia spectrum disorders; and
- a total of 1.2% of adults aged 18 to 65 met diagnostic criteria for a schizophrenia spectrum disorder in the past year.¹⁴

Implications

The inadequacy of services for individuals and families living with severe mental illnesses in BC is well known. An 80% increase in the estimated lifetime prevalence for schizophrenia further emphasizes that current service levels are insufficient.

The full spectrum of services for individuals and families living with schizophrenia and other severe mental illnesses requires greater resourcing, including early psychosis intervention programs, psychiatric hospital beds, community treatments, rehabilitation supports (e.g., cognitive remediation), and other critical support services (e.g., housing).

The lack of services required to meet the needs of the approximately 97,000¹⁵ British Columbians who will be afflicted with schizophrenia at some point in their lives (based on the 1.8% lifetime prevalence rate) is even more concerning when the impact of schizophrenia disorders on individuals, families, and communities is considered:

- Individuals with schizophrenia find it difficult to find employment, with only 15% employed in Canada, and a large proportion of those suffering from this illness rely on social assistance.¹⁶
- Schizophrenia is one of the leading reasons for hospitalization for mental illness, accounting for 19.9% of general hospital stays and 30.9% of psychiatric hospital stays.¹⁷
- People with schizophrenia are 2 to 3 times more likely to die early than the general population.¹⁸
- On average, family/friend caregivers spent 31 hours per week providing care for patients with schizophrenia.¹⁹
- In Canada, the annual cost of schizophrenia has been estimated to be up to CAD \$10 billion in 2022, an increase from CAD \$7 billion in 2004.²⁰

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- ¹ Prevalence rates can be reported on an annual or lifetime basis. Annual rates indicate the number of individuals presenting with an illness in any given year and lifetime rates indicate the number of individuals presenting with an illness at some point in their lives. Therefore, annual prevalence rates tend to be lower than lifetime prevalence rates.
- ² Lecomte, T., Addington, J., Bowie, C. *et al.* The Canadian Network for Research in Schizophrenia and Psychoses: A Nationally Focused Approach to Psychosis and Schizophrenia Research. *Can J Psychiatry* 67, 3, 172-175(2022). doi:[10.1177/07067437211009122](https://doi.org/10.1177/07067437211009122)
- ³ These prevalence rates are based on the most recent data available (2016). Government of Canada. Schizophrenia in Canada. <https://health-infobase.canada.ca/datalab/schizophrenia-blog.html?=&wbdisable=true>. Retrieved April 2023.
- ⁴ National Institute of Mental Health. *Schizophrenia*. <https://www.nimh.nih.gov/health/statistics/schizophrenia>. Retrieved April 2023. Dr. E. Fuller Torrey disputed this prevalence rate and the methodology behind it. Torrey, E.F., Sinclair, E. Hocus Pocus: How the NIMH Made 2 Million People with Schizophrenia Disappear. *Psychiatric Times* 35, 3 (2018). <https://www.psychiatrictimes.com/view/hocus-pocus-how-nimh-made-2-million-people-schizophrenia-disappear>.
- ⁵ Kaoser, R., Jones, W., Dove, N. *et al.* Using novel methodology to estimate the prevalence of mental disorders in British Columbia, Canada. *Social Psychiatry and Psychiatric Epidemiology* 58: 153-162 (2023). <https://doi.org/10.1007/s00127-022-02366-z>
- ⁶ Ringeisen, H., Edlund, M.J., Guyer, H. *et al.* Mental and Substance Use Disorders Prevalence Study: Findings Report (MDPS). RTI International (2023). <https://www.rti.org/publication/mental-and-substance-use-disorders-prevalence-study/fulltext.pdf>
- ⁷ Government of Canada. Schizophrenia in Canada. <https://health-infobase.canada.ca/datalab/schizophrenia-blog.html?=&wbdisable=true>. Retrieved April 2023.
- ⁸ Ibid.
- ⁹ Treatment Advocacy Center. Schizophrenia – Fact Sheet. <https://www.treatmentadvocacycenter.org/evidence-and-research/learn-more-about/25-schizophrenia-fact-sheet#:~:text=An%20estimated%2040%20percent%20of,untreated%20in%20any%20given%20year>. Retrieved April 2023.
- ¹⁰ Cleveland Clinic. Anosognosia. <https://my.clevelandclinic.org/health/diseases/22832-anosognosia#:~:text=How%20common%20is%20this%20condition,of%20people%20with%20Alzheimer's%20disease>. Retrieved April 2023.
- ¹¹ Ringeisen, H., Edlund, M.J., Guyer, H. *et al.* Mental and Substance Use Disorders Prevalence Study: Findings Report.
- ¹² Torrey, E.F., Sinclair, E. Hocus Pocus: How the NIMH Made 2 Million People with Schizophrenia Disappear.
- ¹³ Ringeisen, H., Edlund, M.J., Guyer, H. *et al.* Mental and Substance Use Disorders Prevalence Study: Findings Report.
- ¹⁴ Ibid.
- ¹⁵ Population based on the January 1, 2023 BC population estimate of 5,399,118. British Columbia. Quarterly Population Highlights. Issue #22-04 (January 1, 2023). https://www2.gov.bc.ca/assets/gov/data/statistics/people-population-community/population/quarterly_population_highlights.pdf
- ¹⁶ Canada’s Public Policy Forum. Schizophrenia in Canada: the social and economic case for a collaborative model of care. February 2014. <https://ppforum.ca/wp-content/uploads/2018/03/Schizophrenia-in-Canada-Final-report.pdf>
- ¹⁷ Hospital stays are based on ‘hospital separations,’ which refers to any instance of patients leaving a facility, such as discharge or transfer. Government of Canada. The Human Face of Mental Health and Mental Illness in Canada. 2006. https://www.phac-aspc.gc.ca/publicat/human-humain06/pdf/human_face_e.pdf
- ¹⁸ World Health Organization. Schizophrenia. <https://www.who.int/news-room/fact-sheets/detail/schizophrenia>. Retrieved April 2023.
- ¹⁹ Citrome, L., Belcher, E., Stacy, S. *et al.* Perceived Burdens and Educational Needs of Caregivers of People with Schizophrenia: Results of a National Survey Study. Dovepress 2022, 16 (2022). <https://doi.org/10.2147/PPA.S326290>
- ²⁰ Lecomte, T., Addington, J., Bowie, C. *et al.* The Canadian Network for Research in Schizophrenia and Psychoses: A Nationally Focused Approach to Psychosis and Schizophrenia Research.