Letter to the Editor

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Urbanicity, Schizophrenia and Equitable Specialist Services Allocation

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Based on a representative household survey of handicap in China, Luo et al. 2021 (Can J Psychiatry, April issue)[1] reported a higher prevalence of schizophrenia in large urban areas, and also a higher prevalence in men compared to non-large urban areas. A similar observation can be made in Canada which could influence decision-makers to use more suitable relative needs indicators for resources allocation planning.

Using a Quebec-linked health services utilization database, Ngui et al. demonstrated a higher incidence of schizophrenia in Montreal compared to the rest of Quebec.[2] Also, according to the Canadian Chronic Disease Surveillance System (https://health-infobase.canada.ca/ccdss/data-tool/) of the Public Health Agency of Canada, the cumulative (or lifetime) prevalence of schizophrenia is higher in the 3 provinces with large urban areas (Montreal, Toronto, Vancouver) (prevalence: 1%), than in the other Canadian provinces (prevalence: 0.5%–0.8%) (https://health-infobase.canada.ca/ccdss/data-tool/).

Using an updated Quebec linked health services utilization database and using the case definition method developed in a previous study on the incidence and prevalence of schizophrenia,[3] we measured the incidence of schizophrenia in 2016 in Montreal versus the rest of the province of Quebec of circa 8 million inhabitants, for both males and females. The crude rates per 100,000 inhabitants with their 95% confidence intervals (CI) and relative risks (RR) were for males: 682 (665–698) in Montreal versus 409 (402–416) in the rest of Quebec, with a RR of 1.67; for females: 454 (441–467) in Montreal versus 284 (278–290) in the rest of Quebec, with a RR of 1.60; for both males and females: 566 (556–577) in Montreal versus 347 (342–351) in the rest of Quebec, with a RR of 1.63. The non-overlapping 95% CI indicates a significant 60% higher incidence in Montreal, and a statistically significant higher incidence in both males and females in Montreal compared to the rest of Quebec.

These findings have planning implication for equitable, based on needs, specialist services allocation in very large cities. Schizophrenia patients' volume and rates are an indicator of needs for costly integrated intensive hospital, residential, crisis, first onset psychosis and community-based services.[4] Moreover, males have an earlier and more disabling course, requiring more support from health and social services. Also, the needs for support (for example housing, case management, substance co-morbidity issues) are higher in very disadvantaged areas patients, so that current social indicator weights based on common chronic diseases, do not capture the exponential needs for community psychiatric services in very disadvantaged areas of large cities, and overestimate the needs in affluent regions.[5]

More collaborative international research is required to develop a valid indicator of relative needs in large urban areas. For the moment, the relative risk obtained from existing registers like linked health utilization of services databases shall be encouraged, since they reflect the real-life numbers of severely mentally ill patients to serve with best practices treatment and care.

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