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## LETTER

# Unknown Unknowns: We Need to Know How Many People Experience Imprisonment in Canada

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### Abstract:

#### Background:

Understanding the size of a population is necessary to define the burden of disease, evaluate opportunities to improve health, inform service planning and assess demographic trends over time.

#### Methods:

In this article, we described available data on the number of admissions and number of people admitted to custody in Canada. We identified gaps in data, and described the potential value of these data for public health and health care purposes.

#### Conclusion:

We recommend the systematic collection and dissemination of relevant data on this population in Canada.

**Keywords:** Prisoners, Prisons, Demography, Canada, Health, Population, Disease.

## 1. BACKGROUND

International and Canadian data reveal that the health of people who experience imprisonment is poor compared to the general population [1, 2]. The health of this population may affect the general population directly through the transmission of diseases such as hepatitis C, the costs of recidivism and health care due to untreated illness such as substance use disorders, and effects on public safety [3]. A focus on the health of people who experience imprisonment could reduce inequity and advance population health [3], and efforts to improve health could build on the emerging evidence base regarding effective interventions [4].

Over three hundred years ago, John Graunt articulated the value of population statistics for understanding the “nature of society, the changes taking place within it and the issues arising for government and policy-making” [5]. Data on the size of the population of persons who experience imprisonment could enhance our understanding of the burden of disease, the assessment of the impact of interventions, the development of health and social services and the measurement of trends in incarceration rates.

In Canada, responsibility for correctional facilities is shared between provincial, territorial and federal governments. Provincial and territorial governments administer correctional facilities that hold persons who are detained prior to sentencing (“remand”) and those sentenced to less than two years in custody, and the federal government administers

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facilities for individuals sentenced to two years or longer in custody. A person who is admitted to custody almost always enters a provincial or territorial facility, whether he/she has been sentenced or is admitted on remand. From the provincial or territorial facility, a person would most often be released to the community, with or without parole. If a person was sentenced to two years or longer, he/she would be transferred from the provincial or territorial facility to a federal facility.

While the criminal justice system maintains detailed records of involved persons, there are challenges to determining the number of people who experience imprisonment in Canada beyond the number of persons in custody per day [6]. Potential barriers include the involvement of multiple jurisdictions, the common use of aliases [7], and the lack of collection, aggregation and dissemination of data.

In this article, we describe publicly available data in Canada on people who experience imprisonment, compare this data with the data obtained through requests and identify the potential value of better data for public health and health planning purposes.

## 2. METHODS

### 2.1. What We Know

Annually, Statistics Canada publishes the average daily count of adults in custody, the number of adult admissions per year and the number of initial entries to the correctional system for adults per year [8]. However, the Statistics Canada definitions of “admission” and “initial entry” limit the usefulness of these data for public health and health planning purposes. Statistics Canada defines an admission as each time a person “begins or moves to a new type of custody or community supervision.” Therefore the same person could be counted multiple times within a single period in custody as his/her legal status changes. For example, if a person was admitted to custody and his/her legal status changed from remand to sentenced custody to parole, this would be counted as three “admissions” [9], even though the individual had only one period in custody. In this way, the number of “admissions” overrepresents the number of admissions to custody. As per Statistics Canada, an initial entry represents the first point at which an adult “commences uninterrupted supervision within the adult correctional system” [9]. If a person was admitted to custody, released on parole, and then re-admitted to custody prior to the end of the parole period, this would be counted as a single initial entry even though the individual experienced two periods in custody [2]. In this way, “initial entries” may underrepresent the number of admissions to custody.

Statistics Canada data for 2014/15 (Table 1) reveals that the mean number of adults in custody in provincial, territorial and federal facilities on any given day was almost 40,000 [8]: over 15,000 persons in federal facilities and over 24,000 in provincial or territorial facilities. There were more than 200,000 admissions in the same year (excluding Alberta): 7,565 in federal facilities and 197,454 in provincial or territorial facilities [8]. Data on initial entries per year were available for only six provinces, in which there were almost 53,000 initial entries [8].

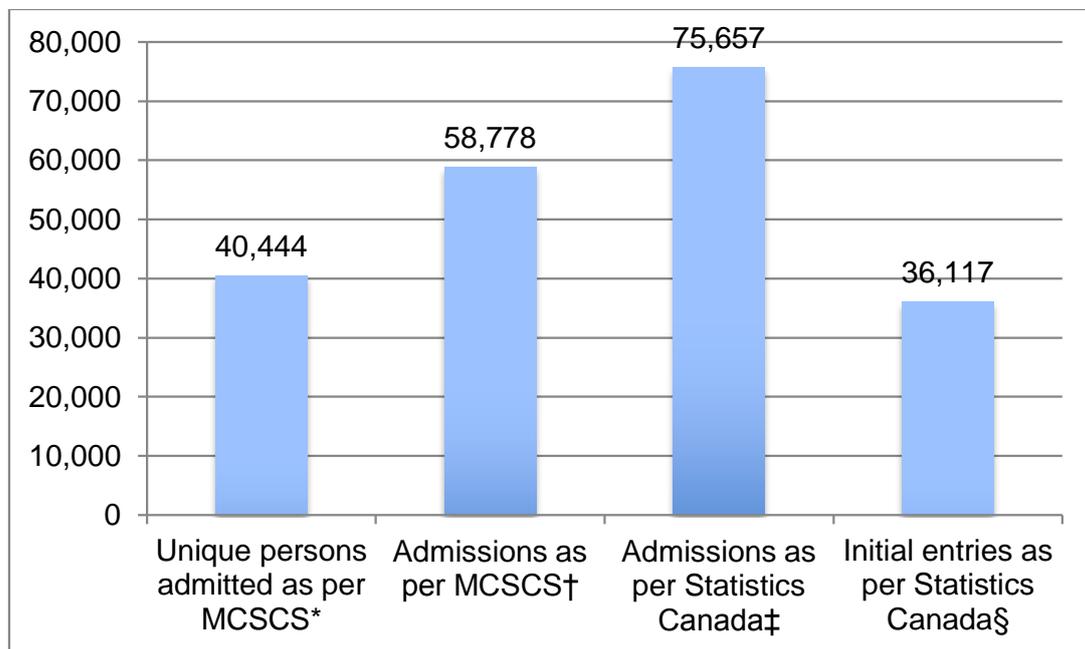
**Table 1. Summary of data for adults admitted to custody, initial entries to custody, and admissions, Canada and Ontario, 2014/2015 [8, 10, 11].**

		Canada		Ontario
		federal facilities	provincial/ territorial facilities	provincial facilities
Persons in custody	Per day	15,168 [8]	24,455 [8]	7,785 [8]
	Per year*	<20,000 [10]	unknown	<48,615 [11]
Initial entries per year†		N/A	52,966‡ [8]	36,117 [8]
Admissions per year	Statistics Canada admissions§	7,565 [8]	197,454 [8]	75,657 [8]
	Admissions to custody	~5,000 [10]	unknown	58,778 [8]

\*Estimate calculated as the number of persons in custody on a given day plus the number of admissions to custody per year. †Initial entry refers to the periods of uninterrupted supervision within the adult correctional system [10]. Data are available for only Newfoundland and Labrador, Nova Scotia, New Brunswick, Ontario, Saskatchewan and British Columbia. §The Statistics Canada definition of admission includes entry to custody and changes in legal status while in custody or on release. This data do not include admissions to provincial custody in Alberta [10]. ||Number of times a person entered custody per year.

Data obtained on request to the Ontario Ministry of Community Safety and Correctional Services reveals that there are large differences between the number of admissions and initial entries as defined by Statistics Canada and the number of actual admissions to provincial custody in Ontario [10 - 12]. The Ontario Ministry reports that there were 58,778 admissions to custody for 40,444 persons in 2014/15 (Table 1) [11]. The number of unique persons admitted to

provincial custody (40,444) is higher than the number of initial entries (36,117) and lower than the number of admissions (75,657) as per Statistics Canada [8], as shown in Fig. (1).



\*MCSCS is the Ontario Ministry of Community Safety and Correctional Services.

†Number of times an adult began a period of detention or incarceration in Ontario.

‡Statistics Canada defines admission as entry to custody and changes in legal status while in custody or on release.

§Initial entry is defined as a period of uninterrupted supervision, whether in custody or in the community.

**Fig. (1).** Comparison of data from Statistics Canada and the Ontario Ministry of Community Safety and Correctional Services for adults admitted to provincial correctional facilities in Ontario, 2014/15 [8, 10, 11].

We can use data from requests to estimate the number of adults who spent any time in provincial custody in Ontario in a given year, which is an indicator of the number of persons with a history of recent detention or incarceration. The number is between the number of people admitted to custody in that year (40,444 in 2014/2015) and that number plus the number of people who were in custody at the start of the year (8,171 on March 31<sup>st</sup>, 2014), since some of those in custody at the start of the year would have been re-admitted over the course of the year [11]. Therefore between 40,444 and 48,615 adults spent time in provincial custody in Ontario in 2014/2015. With a total adult population in Ontario of over 11,001,497 [13], this represents approximately 1 in 300 adults.

We can also use data from requests to estimate the number of people with any history of incarceration in Ontario. For Ontario provincial correctional facilities for adults, 52,407 persons were admitted, making a total of 74,526 times in 2005 [12], 174,449 persons were admitted 389,364 times in the five-year period between 2005 and 2009, and 272,428 people were admitted 724,474 times in the 10-year period between 2005 and 2014. Using a conservative estimate that 9% of the 272,428 adults admitted to Ontario provincial facilities died over that 10-year follow up period [14], these data suggest that the proportion of adults in Ontario who have a history of incarceration in the past 10 years is more than 1 in 50, *i.e.* there are about 250,000 adults with a history of incarceration in Ontario out of the total adult population of over 11,001,497 in 2014 [13]. This is a crude estimate, as the numerator does not account for people who may have moved out of Ontario during this period and includes some people who were admitted to custody who were not residents of Ontario, and the estimate of deaths is likely too high, however, it illustrates that a history of imprisonment is likely common in people in Ontario.

Regarding other criminological and demographic data, Statistics Canada publishes the number of people in remand and sentenced to custody in each province or territory on an average day [8]. They also present data on the distribution of age, gender, “Aboriginal” identity and length of stay in custody for admissions each year, though not for unique individuals [8]. Public Safety Canada publishes data annually on people in federal custody including admissions by sex,

age, Aboriginal status, race, religion and length of sentence [15].

## 2.2. What We Don't Know

Data on the number of persons admitted to custody per year in each province and territory and the number of persons admitted over a several year period are not routinely available. We cannot identify the number of people who entered the provincial and territorial correctional system who were transferred to the federal system; they may be included in the figures for provincial and territorial facilities and for federal facilities as reported in the available Statistics Canada data. Another gap is the number of people who are admitted to custody in more than one province or territory over time. We also do not know important characteristics of this population such as the distribution of age, gender, race and ethnicity.

## 2.3. Why Size Matters

Understanding the number of admissions and the number of persons admitted to custody in Canada is important for several reasons: to justify a focus on this population, to define the potential impact of interventions, for health and social services planning, and to monitor population-level exposure to incarceration, including inequitable exposure.

Decisions regarding health priorities in Canada should be made based on a variety of factors, including population size, burden of disease and equity [16]. If we do not know how many people spend time in correctional facilities each year, or how many people have a history of incarceration, it is difficult to justify focus on this population. For example, understanding the number of persons each year in correctional facilities as well as the disease burden reveals that this setting is key for some prevention efforts in Canada, including for overdose and hepatitis C [17, 18].

Similarly, assessing the impact of an intervention requires knowledge of the size of the total population or of relevant subgroups. For example, in order to estimate the population-level impact over five years of a universal screening program in prison for bloodborne infections, we would need to know how many people are admitted to correctional facilities.

Data on population size and characteristics are also needed for planning health and social services in custody and in the community post-release. If we want to plan an overdose prevention program in provincial correctional facilities, we would want to know how many people are admitted to and are released from these facilities each year in order to estimate the resources required to deliver this program. If we want to anticipate human resource requirements, for example to project the amount of time required for nurses to conduct intake assessments, we would need to know the number of admissions to custody.

Finally, since incarceration is associated with a variety of adverse health and social consequences [19, 20], it may be conceptualized as a risk factor. At a population level, it is therefore, important to track the number of people who are incarcerated over time and as a consequence of public policy and other factors. In addition, human rights and equity concerns suggest the importance of following specific characteristics, such as detention without trial [21], the length of pre-trial detention [21] and the number of indigenous people and other marginalized groups admitted to custody [22]. In light of the risk of stigma, this work should involve affected populations and observe the best practices regarding data governance, including for data on first nation people [23].

## CONCLUSION

While the term “unknown unknowns” is borrowed from another field [24] and perhaps is best known for its use in a specific political context [14], we think this term appropriately describes the state of data on the population that experiences imprisonment in Canada. The data published by Statistics Canada appear to present important demographic information but are not in fact the data we need for public health and health services planning. This leads us to not knowing what we do not know, *i.e.* unknown unknowns. Further, the general lack of health status data for this population [2, 25] represents a combination of known unknowns, that is the data that we know we do not know, and unknown unknowns, as described.

Decades into the era of “big data” [26], provincial, territorial and federal governments in Canada have provided the opportunity to safely collect, aggregate and share data. We recommend that Statistics Canada collects and presents data for each province and territory and for Canada on the number of admissions to custody per year, the number of people who spend time in custody in a one year period, and the number of people admitted to custody in one-year, five-year, and 10-year periods. Further, Statistics Canada should present key characteristics of persons admitted to custody

including socio-demographic characteristics such as age, sex and race/ethnicity and criminological characteristics such as whether people are remanded or sentenced on admission and during their time in custody. Any such work should be done in collaboration with affected populations and other stakeholders to ensure the relevance and use of these data while minimizing the risk of stigma.

#### LIST OF ABBREVIATIONS

CSC = Correctional Service of Canada  
 MCSCS = Ontario Ministry of Community Safety and Correctional Services

#### ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

#### HUMAN AND ANIMAL RIGHTS

No Animals/Humans were used for studies that are base of this research.

#### CONSENT FOR PUBLICATION

Not applicable.

#### CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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