Profile of Male Forensic Patients in a Canadian Correctional Psychiatric Facility

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August, 2022

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August 28, 2022

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Abstract

High prevalence rates of mental disorder among justice-involved persons continues to be a concern for policy makers in correctional settings. To address the needs of patients and develop decisive institutional policies, the profile of patients needs to be identified and the proportion of mental disorders should be estimated more precisely at the institutional level. This study determined the profile of male forensic psychiatric patients (n = 2,362) admitted at a regional psychiatric centre in Canada between 1995 and 2010. Substance Use and Antisocial Personality Disorders were the most prevalent disorders within the sample and had highest rates of comorbidity with other disorders. These two disorders also co-occurred with all other types of Axis I and Axis II disorders at a very high rate. Indigenous patients had significantly higher rates of Substance Use Disorder, Antisocial Personality Disorder, and Intellectual Disability, whereas Non-Indigenous patients had significantly higher rates of Mood/Affective Disorder, Schizophrenia/Psychotic disorders, and Other Axis I and Axis II disorders. The re-conviction rates of the patients were relatively higher than those found in the previous research. Findings will help mental health institutions develop appropriate policies to address the diverse needs of forensic patients and contribute to the provision of evidence-based correctional programs.

Keywords: mental disorders, forensic patients, profile, concurrent disorders

1. Introduction

Identifying the profile of forensic psychiatric patients[1] and the proportion of incarcerated individuals suffering from mental disorders in correctional settings are particularly significant because they have implications for healthcare policy initiatives and implementation. Studies consistently indicate high prevalence rates for mental disorders, infectious diseases, and substance use disorders in correctional settings (Azbel et al., 2013; James & Glaze, 2006). A meta-analytic review of the studies on the prevalence of psychiatric illnesses in correctional settings found a wide range of rates from 14% (Fazel & Grann, 2004) to 88% (Lader et al., 2003). According to a 2009 report by the Correctional Service Canada (CSC); 13% of federal male prisoners were identified at admission as presenting mental health problems, and this proportion had almost doubled since 1996/97 (i.e., from 7% to 13%; CSC, 2009). A survey of newly admitted male federal prisoners in CSC's Prairie region in 2013 found that over 39% of prisoners interviewed met the criteria for a current diagnosis of a mental disorder other than substance abuse or antisocial personality disorder (Beaudette, 2014). Compared the prevalence of mental illnesses in Canadian general population (9.6%), the rate among federal prisoners (13%; CSC, 2009) is slightly higher, however, the rate found in Prairie region (39%; Beaudette, 2014) is at a concerning level. Recently, Beaudette and Stewart (2016) estimated the lifetime and current prevalence rates of mental illnesses in five regional psychiatric treatment centres (RTC) in Canada. Based on the data collected from 1,110 forensic patients at each regional centre for a 6-month period, they found that 73% of the sample has at least one type of mental disorder.

Justice-involved individuals with mental health concerns represent a high need population within correctional settings and pose significant challenges to the agencies responsible for meeting their needs. Addressing the mental health needs of justice-involved individuals promotes their improved quality of life, reduces suffering, respects basic human rights, and meets legislative requirements to provide essential health care services (Beaudette & Stewart, 2016). Increased knowledge and understanding of the prevalence rates of mental disorders at national, local, and institutional levels would lead to the development of appropriate policies to address the diverse needs of forensic patients, aid in the allocation of resources accordingly, and contribute to the provision of evidence-based healthcare services and correctional programs. An important requirement for developing effective treatment policies in Canadian psychiatric institutions is identifying the proportion and needs of Indigenous individuals with mental disorders (Bingham et al., 2019; Boksa et al., 2015). Among other social and health-related problems, Indigenous people in Canada suffer from mental illnesses at disproportionately higher rates because of structural inequities and intergenerational trauma related to colonization (Boksa et al., 2015). The prevalence rates of mental disorders among Indigenous individuals are particularly high compared to others. For example, 95.6% of federally sentenced Indigenous women were diagnosed with at least one current mental disorder compared to 79.2% of overall female prison population (Brown et al., 2018). Further, Beaudette and Stewart (2016) found that the rates of alcohol and substance use disorders, pathological gambling, and personality disorders were significantly higher among Indigenous forensic psychiatric patients in their sample than those of non-Indigenous patients.

[1] In this study, the term 'forensic psychiatric patients' refers to the individuals diagnosed with one or more mental disorders who present a significant risk of offending and/or may have been in trouble with the law (Berman et al., 2012).

Co-occurrence of multiple mental disorders requires additional attention and a differential approach for treatment (Wilton & Stewart, 2017). Research has shown that, when multiple disorders co-occur, especially with substance use disorder, patients have a higher risk of recidivism, suicide, homelessness, family conflict, social marginalization, violent and disruptive behaviour, victimization, general medical problems, and criminal involvement (Bellack & Gearon, 1998; Health Canada, 2002; Ogloff et al., 2015; RachBeisel et al., 1999; Urbanoski et al., 2007). Therefore, it can be anticipated that the rates of co-occurring disorders will be higher among correctional populations than in the general population. For example, in Beaudette and Stewart's (2016) assessment of 1,110 Canadian forensic patients, over half of the participants were diagnosed with a major mental disorder in addition to substance use disorder or antisocial personality disorder. Co-occurrence of mental disorders has also important implications in terms of treatment and institutional policies. Research found that federally sentenced men in Canada with comorbid mental disorders were more likely to be involved in institutional misconducts and violent incidents, transferred to administrative segregation, victimized in the institution, and revoked for technical violations of parole conditions (Wilton & Stewart, 2017). Wilton and Stewart (2017) suggest that interventions targeting co-occurring mental disorders separately may not be adequate. Instead, an integrated treatment approach should be developed to understand and treat the problems resulting from the interaction between multiple disorders. Taken together, identifying the profile of forensic psychiatric patients, the proportion and co-occurrence rates of various mental disorders, and the proportion of Indigenous forensic psychiatric patients in correctional settings with mental disorders is a crucial step in the process of developing effective treatments and avoiding other associated problems.

1.1. Current Study

The purpose of this study is to establish a profile of the forensic psychiatric patients admitted to CSC's Regional Psychiatric Centre (RPC) between the years 1995 and 2010 and identify the proportion and co-occurrence rates of major mental disorders within this sample. RPC is one of the five federal treatment facilities in Canada which provides mental and physical health care to justice-involved individuals in the Prairie region (Saskatchewan, Alberta, Manitoba, Northwestern Ontario, and the Northwest Territories). Justice-involved individuals can be referred to the RPC for further assessment and treatments at any time during their sentences based on the results of the screening procedures. Referrals are made either by the federal correctional institutions in the Prairie region or, in Saskatchewan, by the provincial correctional institutions, courts, or the Saskatchewan Review Board.

The diagnoses on the mental disorders of the patients are made by the teams based on the information obtained from assessments during the admission process and notes from the patients' file. Upon discharge, each patient receives a discharge summary which is written by a psychiatrist and provides a synopsis of the patient's history, examination, care, and treatment at RPC. Understanding and recognizing the profile of the patient population is key to providing appropriate, relevant and effective treatment interventions, making effective management decisions, and allocating resources to the highest need areas. This study focuses on four major aspects of admissions to RPC: (1) Profile of forensic psychiatric patients admitted to RPC between the years 1995 and 2010; (2) Proportion of Axis I and Axis II disorders among the patients; (3) Difference between the Indigenous and non-Indigenous patients within the sample

in terms of the proportion of mental disorders; and (4) Comorbidity rates of mental disorders within the sample and within each mental disorder category.

2. Method

2.1. Data

Over a 15-year period (1995-2010), data were collected on all male admissions to RPC through RPC treatment files, CSC files, and the Offender Management System. Data used in this study included the details on 2,362 individual patients admitted to RPC. The protocol included demographic, criminal/forensic history and management, diagnoses, clinical presentation (e.g., signs and symptoms, medication usage), treatment care and discharge plans, and post-release recidivism. Informed consent was not required in this study as per the Privacy Act and the CSC Commissioner's Directives 009 which allows access to an individual's file information for research or statistical purposes, provided that active subject participation is not required, and the researchers have the necessary security clearance with the CSC. All patients were coded with an identification number. Only the researchers had access to the code and matching data. As well, all researchers had a contractual agreement with CSC to keep all information collected and/or recorded confidential. Approval to conduct this study was sought and obtained from the CSC in accordance with its policy.

2.2. Data Analysis

Descriptive analyses were conducted to identify the demographics of the sample and prevalence of mental disorders within the sample. Chi-square tests were used to identify whether there were statistically significant differences between the proportion of mental disorders among Indigenous and non-Indigenous patients, and to determine the comorbidity rates of mental disorders within the sample and within each disorder category. To measure the degree of association between ethnic identity (Indigenous or non-Indigenous) and having mental disorders, we identified the phi coefficient, which is a measure that adjusts the chi square statistic by the sample size, for each chi-square test.

3. Results

3.1. Sample characteristics

Table 1 shows the demographics and admission records of patients admitted to RPC between the years 1995 and 2010. Nearly half of the patients were Indigenous (48%). Most of the patients were single (56%), under 50 years of age (90%), and admitted to RPC only once (68%). Only 4% of the patients had postsecondary school education. Seventeen percent of the patients stayed more than a year at RPC, 4.6% stayed more than two years, and nearly 14% stayed less than one month.

Nearly half of the patients were convicted of violent offences (48%). The rate of those who were convicted with non-violent crimes (25%) and sexual crimes (25%) were similar. More than half

of the patients in the sample (52%) served more than 2 years in prison before their admission to RPC, and nearly a quarter of the patients served more than 5 years.

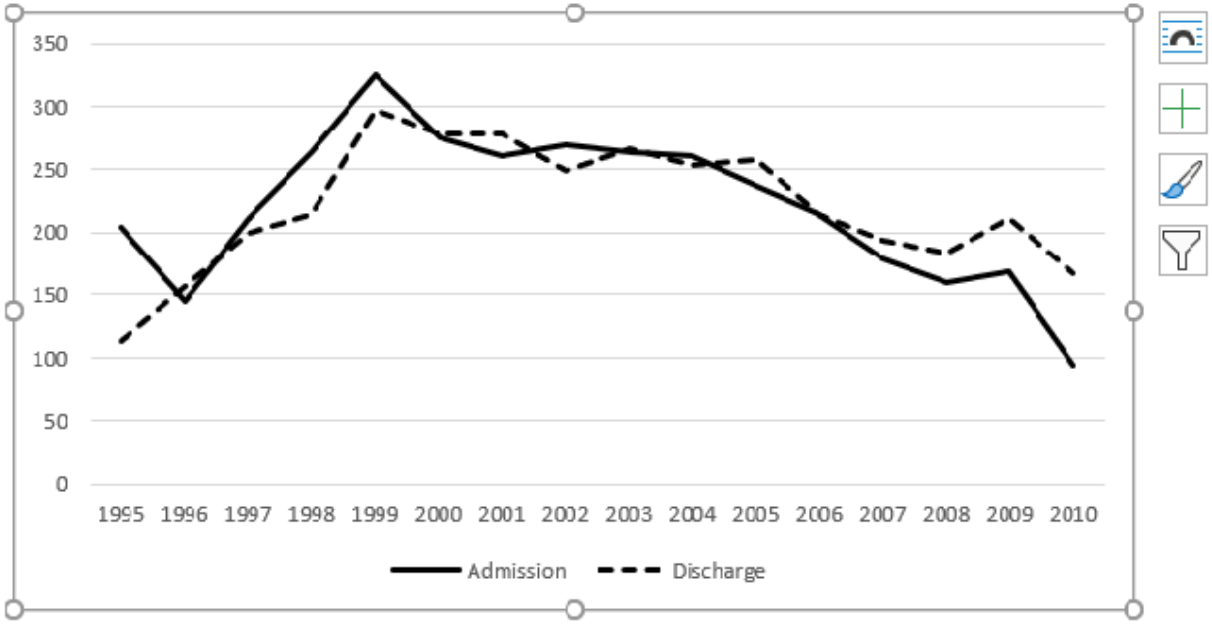
The analysis of the history data of the patients indicated that, prior to their admission to RPC, the rate of Intravenous Drug Use among the sample was approximately 9%. Nearly 37% of the patients had previous record of psychiatric illness. Further, 19% had a history of attempted suicide and 11% had a record of self-harm behaviour. Those who had a family member with a record of mental illness constituted approximately 13% of the sample.

Table 1. Descriptive Statistics for Discharged Patients (*N* = 2,362)

	N	%		*N*	%
Race			*Type of Index Offence*		
Indigenous	1124	47.6	Violent Offence	1128	47.8
Non-Indigenous	1185	50.2	Sexual Offence	587	24.9
Unknown	53	2.2	Non-violent Offence	598	25.3
Education Level at Last Discharge			*Time Served Before Admission*		
Grade 1 to 6	277	11.7	<6 months	271	11.9
Grade 7 to 9	574	24.3	7-12 months	336	14.8
Grade 10 to 13	882	37.3	1-2 years	486	21.4
Post secondary school	101	4.3	3-5 years	612	26.9
Unknown	528	22.4	>5 years	569	25
Marital Status at Last Discharge			*Number of Admissions*		
Single	1333	56.4	One	1610	68.2
Married/Common law	534	22.6	Two	421	17.8
Separated/Divorced	407	17.2	Three	156	6.6
Widowed	39	1.7	Four or More	175	7.4
Unknown	49	2.1			
			Length of Stay at RPC		
Age at Last Discharge Group (years)			<1 month	319	13.5
>21	59	2.5	1-3 months	385	16.3
21-35	1199	50.8	4-6 months	393	16.6
36-50	860	36.4	7-12 months	869	36.8
>51	232	9.8	1-2 years	288	12.2
Unknown	12	0.5	>2 years	108	4.6
History					
Intravenous drug use	206	8.7			
Psychiatric illness	863	36.5			
Suicide attempt	447	18.9			
Self- harm	267	11.3			
Family mental illness	312	13.2			

On average, 220 patients were admitted to and discharged from RPC annually between 1995 and 2010. Figure 1 shows the yearly change of admissions and discharges. The highest number of admissions was seen in 1999 (n = 326). Since 1999, the number of admissions steadily declined. The minimum number of admissions occurred in 2010 (n = 95).

Figure 1. Yearly Number of Admission and Discharge at the Treatment Centre



3.2. Re-conviction Rates

The re-conviction records of the patients discharged from the RPC within two-year, five-year, and ten-year follow up periods were retrieved (n = 1,754). Table 2 shows the general re-conviction rates of the sample as well as the re-conviction rates in three broad crime categories: violent, non-violent, and sexual crimes. Within the discharged patients whose re-conviction record was available at the time of data collection (January 21, 2015), the general re-conviction rates were 36.6% in two years, 58% in five years, and 70.1% in ten years follow up periods. The highest re-conviction rate was in non-violent crimes in all periods (30.8%, 47.2%, and 54.7% respectively). The violent re-conviction rates (9.7%, 17.8%, and 22.4% respectively), and sexual re-conviction rates (0.8%, 2.2%, and 3.5% respectively) were much lower than non-violent re-conviction rates in all three follow up periods.

Table 2. Re-conviction Rates After 1st Release from the Centre

	2 year follow up (*N* = 1,663)		5 year follow up (*N* = 1,504)		10 year follow up (*N* = 959)	
Type of Re-conviction	*N*	%	*N*	%	*N*	%
Re-conviction	608	36.6	873	58.0	672	70.1
Violent Re-conviction	162	9.7	267	17.8	215	22.4
Non-Violent Re-conviction	512	30.8	710	47.2	525	54.7
Sexual Re-conviction	14	0.8	33	2.2	34	3.5

3.3. Proportion of Mental Disorders

The proportion of Axis I and Axis II disorders among the patients in the sample are provided in Table 3. Nearly 94% of the sample had at least one type of mental disorder. The most diagnosed disorders within the sample were Substance Use (69%) and Antisocial Personality Disorder (70%).

Table 3. Proportion of Mental Disorders

	N	**%**
Any mental disorder	2,217	93.9
Axis I Disorders		
Schizophrenia/Psychotic Disorder	694	20.1
Mood/Affective Disorder	680	19.7
Substance Use Disorder	2,396	69.1
Other Axis I Disorders	570	16.5
Axis II Disorders		
Antisocial Personality Disorder	2,403	69.6
Borderline Personality Disorder	378	10.8
Other Personality Disorders	373	10.8
Intellectual Disability	285	8.3

3.4. Indigenous vs Non-Indigenous Patients

There were statistically significant differences between the Indigenous and non-Indigenous patients in terms of the proportion of certain disorders (see Table 4). Indigenous patients had significantly higher rates of Substance Use Disorder, Antisocial Personality Disorder, and Intellectual Disability than non-Indigenous patients. On the other hand, the proportion of Mood/Affective Disorder, Schizophrenia/Psychotic Disorders, Other Axis I Disorders, and Other Axis II Disorders was significantly higher among non-Indigenous patients than among Indigenous patients. The phi coefficients calculated in each one of these chi-square tests indicated that the associations between having mental disorders and ethnic identity (being Indigenous or non-Indigenous) were weak.

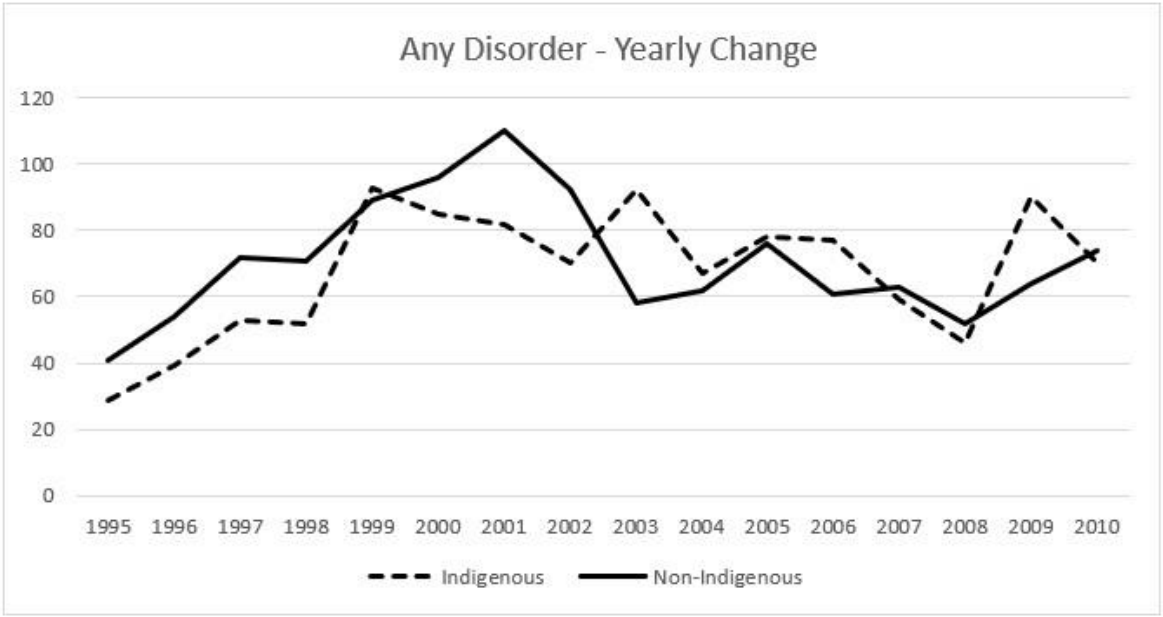
Table 4. Proportion of Mental Disorders for Indigenous and Non-Indigenous Patients

	Indigenous (*n* = 1124)	**Non-Indigenous (*n* = 1185)**			
Disorder	**% (*n*)**	**% (*n*)**	**X^2**	**df**	**Phi**
Any disorder	96.3 (1,082)	95.8 (1,135)	16.10**	2	.08
Axis I Disorders					
Mood/Affective	15.0 (166)	23.0 (279)	60.98**	4	.16
Schizophrenia/Psychotic	14.9 (165)	18.2 (212)	30.44**	4	.12
Substance use	81.6 (902)	60.0 (700)	162.73**	4	.27
Other Axis I Disorders	3.5 (39)	3.9 (46)	35.33**	4	.12
Axis II disorders					
Borderline Personality	6.5 (72)	6.5 (76)	24.37**	4	.10
Antisocial Personality	74.1 (819)	62.5 (729)	64.66**	4	.17
Intellectual Disability	9.3 (103)	5.8 (68)	33.78**	4	.12
Other Axis II Disorders	8.4 (93)	13.2 (154)	37.72**	4	.13

**p < .01

Over the years, the proportion of Indigenous individuals admitted to the RPC has fluctuated between 45% and 55%. The trends in the number of Indigenous and non-Indigenous patients diagnosed with any mental disorder at RPC were similar during the 15 years (see Figure 2). However, the trends were in reverse direction between the two groups from 1999 to 2001, from 2002 to 2003, and from 2009 to 2010.

Figure 2. Yearly Change in Diagnosis of Any Disorder (Indigenous vs. Non-Indigenous)



3.5. Comorbidity

There were remarkably high rates of comorbidity between certain mental disorders diagnosed within the sample. Table 5 shows the comorbidity rates within the disorder category listed on the first column. In all categories, more than half of the patients who were diagnosed with the disorder in that category were also diagnosed with Substance Use and/or Antisocial Personality Disorder. Specifically, Substance Use Disorder was seen at a high rate among the patients who were diagnosed with Schizophrenia / Psychotic Disorder (58%), Mood/Affective Disorder (70%), Other Axis I Disorders (51%), Antisocial Personality Disorder (81%), Borderline Personality Disorder (73%), Intellectual Disability (67%), and Other Axis II Disorders (67%). Similarly, there was a high rate of diagnosis of Antisocial Personality Disorder among patients who were diagnosed with Schizophrenia/Psychotic Disorder (66%), Mood/Affective Disorder (72%), Substance Use (78%), Other Axis I Disorders (63%), Borderline Personality Disorder (79%), Intellectual Disability (54%), and Other Axis II Disorders (46%). There was also a high rate of comorbidity between Borderline Personality Disorder and Mood/Affective Disorder (40%) and between Other Axis I Disorder and Mood / Affective Disorder (43%).

Table 5. Rates of Comorbidity within the Category*

	Schizophrenia / Psychotic Disorder	Mood / Affective Disorder	Substance Use	Other Axis I Disorder	Antisocial PD	Borderline PD	Intellectual Disability	Other Axis II Disorder
Schizophrenia / Psychotic Disorder		8.3	58.4	9.8	66.4	4.9	10.9	13.4
Mood/Affective Disorder	7.0		69.6	21.3	71.7	13.0	8.0	9.3
Substance Use	13.9	19.7		7.1	78.2	6.7	7.3	10.3
Other Axis I Disorder	16.6	42.8	50.7		62.9	10.5	10.0	14.8
Antisocial PD	16.4	21.1	81.0	9.2		7.5	6.0	7.3
Borderline PD	12.8	40.3	73.2	16.1	79.2		8.7	12.8
Intellectual Disability	24.0	21.0	67.4	13.1	53.7	7.4		10.9
Other Axis II Disorder	20.8	17.2	66.8	13.6	45.6	7.6	7.6	

* The rates on this table indicates the percentage of the disorders in the top row within the categories listed in the first column.

4. Discussion

This study analyzed admissions and discharge data gathered at RPC over 15 years (1995-2010). The findings on the proportion of different disorder typologies and comorbidity rates present a profile of the sample used in this study, thus, they do not indicate the prevalence of the disorders in the prison population. Our findings, however, can be used at an institutional level to inform clinical service delivery, including risk assessment, and identify ways and means of perceiving change, therapeutic efficacy, and areas for improvement.

Results indicated that 94% of the sample were diagnosed with at least one mental disorder, whereas in a previous study conducted on patients in five regional psychiatric treatment centres in Canada, Beaudette and Stewart (2016) found that 81% of the sample met the diagnostic criteria for at least one mental disorder. Substance Use (69.1%) and Antisocial Personality Disorders (69.6%) were the most diagnosed disorders within the sample at rates which are remarkably higher than those found in a study conducted in the Prairie region correctional facilities of the CSC (59% and 40% respectively; n = 328; Beaduette, 2014) and those found by Beaudette and Stewart (2016) (49.6% and 44.1% respectively). The proportion of patients diagnosed with Mood/Affective Disorders (19.7%) in the current study is also higher than those found in other Canadian prison populations (e.g., 16% in Beaduette, 2014; 15.5% in Wormith & McKeague, 1996; 16.9% in Beaudette & Stewart, 2016). Similarly, Schizophrenia/Psychotic Disorder (20.1%) is remarkably more prevalent in our sample than other Canadian prison samples (e.g., 2.2% in Bland et al., 1990; 3.3% in Beaudette & Stewart, 2016; 4.9% in Corrado et al., 2000)

Substance Use and Antisocial Personality Disorders co-occurred with all other types of Axis I and Axis II disorders at a very high rate. Wilton and Stewart (2017) examined the impact of the co-occurrence of substance use and other disorders on the correctional outcomes for 715 federal prisoners in Canada and found that those with co-occurring disorders had significantly more criminal histories, institutional charges, transfers to segregation while incarcerated, and reconvictions. Identifying the co-occurrence rates of mental illnesses has important implications for treatment policies. The most promising treatment strategy suggested for co-occuring disorders is an integrated approach that includes diverse techniques such as harm reduction, treatment in stages, motivational interviewing, cognitive-behavioural interventions, and modified 12-step self-help groups (RachBeisel et al., 1999).

Indigenous patients in our sample had significantly higher rates of Substance Use Disorder, Antisocial Personality Disorder, and Intellectual Disability, whereas non-Indigenous patients had significantly higher rates of Mood/Affective Disorder, Schizophrenia/Psychotic disorders, and Other Axis I and Axis II disorders, which is a similar pattern found by Beaduette (2014) and Beaudette and Stewart (2016). In 2012, the Mental Health Commission of Canada developed a national strategy for mental health care. One of the six strategic directions mentioned in the document was addressing the mental health needs of Indigenous peoples by acknowledging their distinct circumstances, rights and cultures, and the impacts of colonization and intergenerational trauma. Identifying the prevalence rates of specific mental illnesses among Indigenous populations is an important step for treatment as they indicate the need for allocating more resources to specific types of illnesses and developing new treatment models for them. Despite

the statistically significant difference between Indigenous and non-Indigenous patients in the prevalence rates, these outcomes should be considered with caution because the degree of association between these two variables were low in our analysis.

Our study found very high recidivism rates in 2-year, 5-year, and 10-year follow up periods after the first release of the forensic patients in the sample from the RPC (30.8%, 47.2%, and 54.7% respectively). Previous research has shown that recidivism rates of forensic patients discharged from forensic psychiatric services are significantly lower than many comparative groups. In a meta-analytic study which systematically reviewed 35 studies from 10 countries (N = 12,056), the average recidivism rate found for the forensic patients who were discharged from forensic psychiatric centres varied between 0% and 24.2% with an average rate of 4.5% (Fazel et al., 2016). In our sample, most of the patients who were re-convicted after their release from the RPC were re-convicted with non-violent crimes. The violent re-conviction rates and sexual re-conviction rates were much lower than non-violent re-conviction rates in all three follow up periods.

In a study in the Netherlands, 52% of the forensic patients at a forensic treatment centre with both mental illness and substance abuse and 51% of those with only substance abuse issues recidivated after their release, while 38% of those with no disorders recidivated (Van Horn et al., 2018). A meta-analytic review found that, on average, individuals with violent crime records who received treatment had 10.2% lower and individuals with non-violent crime records had 11.2% lower recidivism rates than those who did not receive treatment (Papalia et al., 2019). This shows that, through enhanced evidence-based treatment programs, the recidivism rates of patients can be reduced to a lower level. In fact, in our sample, a comparison of the types of index offences at admission with the types of offences at reconviction gives an idea about the potential positive impact of treatment programs at the RPC. The rate of violent offences among admitted patients was 48%, and the reconviction rate with violent offenses after the first release was 9.7% in 2-year, 17.8% in 5-year, and 22.4% in 10-year follow up periods. Similarly, individuals with sexual crime records comprised 25% of the sample, while the rate of released patients who were reconvicted with sexual offenses were 0.8% in 2-year, 2.2% in 5-year, and 3.5% in 10-year follow up periods. This indicates that, in line with the Papalia et al.'s (2019) meta-analytic findings, treatment at RPC between 1995 and 2010 might have an influence in the reduction of reconviction rates in violent and sexual crimes among the sample. A detailed analysis of the impact of specific treatment programs delivered at RPC for different types of crimes and controlled clinical trials are needed to better understand this treatment effect.

Since 1999, the number of admissions to RPC steadily declined. The yearly number of diagnoses of any mental disorder fluctuated throughout the years. Since the establishment of RPC in 1978, the need for increased number of beds for mentally ill patients continued to grow and, as a result, the capacity was increased by 100 beds in 1998 mostly for psychiatric rehabilitation purposes. Also, in 2006, a review of the Regional Treatment Centres operated by CSC was undertaken following which a decision was made to review the admission criteria to the Regional Treatment Centres, including the study site, RPC. This review ensured that only patients with psychiatric disorders were admitted unlike previously when incarcerated individuals could be admitted primarily for correctional programs even when they had no psychiatric disorders that required treatment.

It is noteworthy that, in 2016, Indigenous Peoples comprised 4.9% (1,673,785) of the total Canadian population and 16.3% (175,015) of the population of Saskatchewan according to the Census (Statistics Canada, 2018). However, by the end of the 2018-19 fiscal year, Indigenous individuals accounted for 30% of the total prison population under the authority of the CSC (Office of the Correctional Investigator, 2020). In our sample, the proportion of Indigenous individuals has fluctuated between 45% and 55%. The overrepresentation of Indigenous patients at RPC may be a reflection of increased attention paid to the mental health needs of incarcerated individuals especially as it relates to mental health needs of Indigenous patients at the institutions.

4.1. Limitations

This study has some limitations due to the nature and extent of the data used in the analyses. First, although the findings are consistent with the literature and relevant to the current treatment policies thanks to the longitudinal recidivism findings, the study should be replicated with the updated data to better understand the current needs in the mental health system. Second, RPC is one of the five regional forensic psychiatric centres in Canada. The profile of the male forensic patients admitted to RPC cannot be generalized to the rest of the country. Future studies should analyze data collected from the other four centres to draw a more comprehensive profile of forensic psychiatric patients in federal institutions across Canada. Finally, this study only examined male patients. Mental disorders among female patients should also be examined in future research as they are likely to have a different profile and corresponding mental health needs than male patients.

4.2. Conclusions

This study was an initial attempt to identify the profile of forensic patients admitted to a Canadian psychiatric treatment centre. Our study provided a profile of male forensic psychiatric patients at this centre between 1995 and 2010. Findings indicated high prevalence of Substance Use and Antisocial Personality Disorders and high co-occurrence rates of these disorders with all other types of Axis I and Axis II disorders. An important finding was the higher rates of Substance Use Disorder, Antisocial Personality Disorder, and Intellectual Disability among Indigenous patients than non-Indigenous patients. We also found that non-Indigenous patients have higher rates of Mood/Affective Disorder, Schizophrenia/Psychotic disorders, and Other Axis I and Axis II disorders than Indigenous patients. More research with up to date and more comprehensive data is needed to better understand the profile of forensic patients. Despite the limitation of our data, these findings can contribute to the growing literature on profiling forensic patients; helping mental health institutions develop appropriate policies to address the diverse needs of forensic patients; and contributing to the provision of evidence-based correctional programs.

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