Health Status and Health Services Use of Female and Male Prisoners in Provincial Jail

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Table of Contents

Introduction	
Background	
The Health Status of Prisoners	2
The Use of Health Services by Prisoners	2
Prisoners' Health Status and Use of Health Services in Canada	2
Methodology	3
Participants	3
Methods	
Findings	
Definitions of Health	
Health Status	6
Physical Health	6
Mental Health and Substance Use	12
Changes in Health	13
Factors Influencing Health	13
Health Services	18
Available Health Services	19
Use of Health Services	20
Access to Health Services	22
Quality of Health Services	23
Summary and Conclusion	26
Recommendations	27
References	20

Introduction

While a considerable amount of research has been dedicated to exploring the incarceration experiences of prisoners, very little research has focused on the health status of prisoners and their use of health services during incarceration. Quality of care and access to health services has been investigated even less. Research on these topics is virtually non-existent in the Canadian context, especially with respect to provincial prisoners, as much of the research focuses on federal prisons. The need for more research on the health of provincial prisoners and health services in jail emerged from a study that found that poor health among female prisoners and the lack of health services available in provincial jail were key issues for women during incarceration and negatively influenced their ability to successfully reintegrate in the community after they were released from jail. The Atlantic Centre of Excellence for Women's Health undertook a mixed-methods research study to further explore these findings, examining and comparing the health status and health service utilization of women and men incarcerated in a provincial correctional facility located in Atlantic Canada. The findings from the survey and focus group data demonstrated that prisoners experienced a number of physical and mental health issues and a large proportion used health services during incarceration. The quality and accessibility of health services played a significant role in how participants viewed health care in jail. Sex and gender were shown to influence the health status and use of health services among provincial prisoners. Females reported more heath issues and poorer overall health, as well as more difficulties accessing health services during incarceration than male prisoners. Race also played a role in health status and health service utilization. Aboriginal prisoners rated their overall physical and mental health poorer than non-Aboriginals. They also reported a greater need for health services, but used them less than non-Aboriginal prisoners.

Background

Rates of imprisonment are increasing dramatically in many countries around the world. According to the World Prison Population List, prison populations have increased by 73% over a relatively short period of time. Although Canadian imprisonment rates are lower or comparable to worldwide rates, the numbers are steadily escalating. From 2004 to 2008, the number of individuals admitted to custody or community supervision rose from 211,970 to 262,067.³ The number of female and Aboriginals, who are already overrepresented in the prison population, is rapidly increasing as well. ⁴ As a result of rising imprisonment rates nationally and globally, researchers, and advocates, as well as correctional providers and policy makers are paying more attention to the experiences of prisoners prior to, during, and after being released from prison. One area that is receiving considerably more attention is the health and well-being of prisoners, as well as prison health services. A growing awareness of the need to provide health services similar to the standards of health care in the community has emerged. In Canada, as stipulated in the Canada Health Act,⁵ this includes access to publically administered health care that is comprehensive, universal, portable, and accessible to all residents regardless of financial and other barriers in order to protect, promote, and restore physical and mental well-being. The United Nations, in its Basic Principles for the Treatment of Prisoners and Rules for the Treatment of Women Prisoners, which Canada has endorsed and reinforced, a declared that all prisoners shall have access to the same health services available in their country without discrimination on the grounds of their legal status. Given the lack of publically available information on the health status of prisoners and their access to

^a See Correctional Services Canada. Human Rights and Corrections: A Strategic Model (1999). www.csc-scc.gc.ca/text/pblct/rights/human/im4630-02-eng.shtml

health services during imprisonment, it is difficult to assess whether prisoners in Canada have access to the same level of health care as other residents.

The Health Status of Prisoners

Prisoners experience disproportionately high levels of both physical and mental health issues, including chronic conditions, infectious diseases, and mental health issues. Interestingly, despite having a number of health problems, prisoners often perceive their overall health as being good. The high prevalence of health problems among prisoners has been attributed to socioeconomic characteristics linked to poorer health in the general population, including poverty, low income, low education, unemployment, and race. Research also suggests that features of the prison environment impact the physical and mental health of prisoners, including violence, overcrowding, and isolation. Although sex and gender are considered to be one of the most significant predictors of health status among the general population, fe few studies have compared the health of female and male prisoners within the same correctional setting. One study found that female and male prisoners report the same types of physical health ailments (e.g., back and joint problems, skin rashes, headaches, etc.), but that females report a greater number of physical health problems than males.

The Use of Health Services by Prisoners

Less information is available on the use of health services by prisoners than health status. The literature has demonstrated that prisoners use more health services than the general population. Research has also shown that prisoners who report more health issues, visit health services more frequently during incarceration than prisoners with fewer physical and mental health problems. Studies that examine sex and gender as a variable in the use of health services by prisoners found that female and male prisoners report similar rates of health care utilization. Phe literature has also pointed out that many prisoners do not receive the care they need during incarceration, including medical examinations and mental health services. The high prevalence of health problems and diverse use of health services by prisoners suggest the necessity of evaluating such services, yet evaluations of prison health care services are not frequently reported in the literature. We located two studies investigating prisoners' satisfaction with health services during incarceration, which found concerns among prisoners about the quality and accessibility of health care. Male and female prisoners were largely dissatisfied with the quality of care provided during incarceration, yet females were more likely to view health services positively. In addition, while both male and female prisoners faced a number of challenges accessing care in prison, females reported more difficulties than males.

Prisoners' Health Status and Use of Health Services in Canada

Much of the literature on the health of prisoners and their use of health services during incarceration is based on findings from the United States^{8-9,14,19-20} and Europe.^{17,21} There are few studies or public documents outlining health status and health services of prisoners within the Canadian context. The primary source of information available is from a report released by Correctional Services Canada⁴ describing the health of prisoners in federal prisons, who serve a minimum sentence of two years. According to the report, federal prisoners have poorer health status and significantly higher rates of unhealthy behaviours (e.g., smoking, alcohol and substance abuse, and injection drug-use), mental illness, chronic and infectious diseases, injuries, and premature death than the general population. A

large proportion of federal prisoners also use health services frequently during incarceration. Nothing comparable to this study exists for women and men in provincial jails, who are sentenced to less than two years. The few studies that have been conducted focus on a particular aspect of prisoner health, such as HIV/Hepatitis C rates 22-23 or substance use. 24-25

This report brings together survey data and focus group information to begin to identify the health status of female and male prisoners and their use of health services during incarceration, as well as the accessibility and quality of health services at the provincial level. This report is a timely and valuable contribution to current discussions on prisoner health and health service utilization. First, as previously mentioned, there is little information on the health status of prisoners in Canada and what is available is largely based on federal prisoners. Second, the data is based on large group data from prisoners' medical records and does not always account for differences in sex, gender, race, and other determinants of health. Third, we do not know a lot about the use of health services by prisoners at the provincial level. Fourth, evaluations of the accessibility and quality of health services are not detailed in the Canadian literature. Gaining insight into these issues from the perspective of female and male prisoners who have been incarcerated in a provincial jail will help inform future research, as well as policy and practice recommendations.

Methodology

Participants

The sample consisted of 65 prisoners incarcerated in provincial jail. Forty-three were male, 20 female, and the sex of two individuals was not identified. Participants ranged in age from 18 to over 60, with the majority being under the age of 40 (68%). The racial and ethnic backgrounds of participants were Caucasian (79%), Aboriginal (14%), African decent (4.8%), and Bi-racial (1.6%). All but two participants were born in Canada. English was the common first language of 87% participants, while 10% were French and 3% both languages. More female prisoners were French (20%) compared to males (5%). Of the 63 participants who identified their sexual orientation, 59 were heterosexual and three identified as being either gay or bisexual.

In terms of relationship status, 48% of males and 20% of females were single. Most of the women (75%) and men (76%) surveyed had children. Almost half (47%) of the women and 10% of men were single parents. Prior to incarceration only a small percentage (19%) of participants, 20% of females and 16% males, were living with their children. Many children were in the care of prisoners' extended families, the other biological parent, Social Services, or were old enough to be living on their own. In addition to children, 43% of all participants reported living with their partners, family members (17%), friends (13%), or others (2%), while 25% lived alone. Almost half (49%) of all participants rented their dwellings prior to incarceration, 27% owned their homes, 14% lived in temporary accommodations, 3% in supported living, and 5% were homeless.

The majority of participants (76%) had high school educations or less. Males (17) were more likely to have completed high school and completed some college courses than female (3) participants. Four women and two men had completed college or university. Most participants reported low incomes, with over half reporting \$20,000 or less. Women and men had noticeably different income and employment distributions. Ninety-two percent of females were making \$20,000 or less compared to 37% of males.

More women (73%) than men (65%) relied on income support. Female participants (70%) were also more likely than males (40%) to be unemployed prior to incarceration. Of the participants who were working, women (67%) were less likely than men (73%) to be employed full time.

Sentence lengths ranged from less than one month to two years. Overall, female participants reported shorter sentences than males. Sixty percent of women were sentenced to three months or less in comparison to 30% of men. Approximately the same percentage of women and men were serving between 4-12 months, 40% and 47% respectively. None of the females surveyed had sentence lengths over one year compared to 6% of males.

Methods

We conducted a mixed-methods study that included a survey and focus groups between October and November 2010. The study took place at a provincial correctional facility in Atlantic Canada that houses both female and male prisoners. The correctional centre was designed for 120 prisoners. Rising incarceration rates have meant that the capacity is often exceeded. In 2009-2010, there was an average of 136 males and 31 female prisoners, but the population grew as high as 180 prisoners. There were 150 prisoners at the jail (23 females and 127 males) on the first day of the study. For security reasons, 34 prisoners were deemed ineligible to participate by correctional staff. An additional 29 prisoners were not surveyed due to logistical issues. Of the remaining 87 prisoners, 65 filled out the survey, for a 75% response rate. Twenty-two of the survey respondents (14 men and eight women) participated in the focus groups.

Prior to conducting the study, ethical approval was received from a university research ethics board. The survey was also pilot tested with a group of five formally incarcerated women for language, content, and length. Written consent was given by all participants prior to the survey and focus groups. Participants were eligible to participate in the survey if they were 18 years of age or older, serving a provincial sentence, and could read and write in English. We asked focus group participants to meet the additional criteria of having both completed the survey and served at least one month in jail so that they had some familiarity with the jail's health services. Participants were recruited for the survey through flyers posted in the jail, verbally by correctional staff one week before the study, and by the researcher on the days the surveys took place. Focus group participants were selected from those who expressed an interest on the survey and who had not yet been released from jail between survey and focus group dates.

Participants filled out the survey in groups of 20 or less over two days, as organized by correctional staff according to cell unit. The survey took approximately one hour to complete. Survey questions were largely closed ended with opportunities for participants to write comments. The survey asked questions about demographic information, health status, health needs, as well as access to and use of health services. During the survey, the researcher was present to answer any questions and to assist individual participants with lower literacy levels. A correctional guard was present in the room during the surveys, as well as the focus groups. After a preliminary analysis of the survey data that informed the focus group questions, we held four focus groups: three with male prisoners and one with females. Again, focus groups were arranged by correctional personnel based on the cell units. The number of participants in each group ranged from three to six, for a total of 22. The focus groups were between 30-60 minutes in length and were tape recorded with the permission of participants. Focus group questions were open-

^b Personal communication, Department of Public Safety, June 1, 2010

ended and semi-structured. The questions built on the survey, asking about various aspects of health status and health services.

With respect to data analysis, survey data were organized and analyzed using the computer program SPSS.™ Descriptive statistics were compiled and chi-square tests for independence carried out to determine if health and heath service ratings were dependent upon each other. We looked at health status and the use of health services of prisoners by sex, age, race, sexual identity, income, education, relationship status, and length of sentence – all of which are presumed to be associated with health. Given the relatively small number of survey participants, many relationships were not statistically significant. As a result, the majority of survey data we report is based on descriptive results by sex. We also report the descriptive statistics for Aboriginal prisoners, as they are overrepresented in the prison population. Given the relatively small number of Aboriginal participants (9), we did not disaggregate their responses by sex. Instead we report on the combined findings of both female and male Aboriginal prisoners. The focus groups were transcribed verbatim. The transcripts, as well as any field notes, were read-over by members of the research team. The research team then worked collaboratively to identify themes or emerging patterns within the prisoners' stories and code them according to their prevalence and personal impact on participants (as identified by the prisoners themselves). NVivo 7™ was used to organize the qualitative focus group data, as well as for coding and thematic analysis. The findings from the focus groups were compared and contrasted with the survey result to identify common themes related to health status and the use of health services of prisoners.

In addition to the survey and focus groups with prisoners, informal consultations with correctional staff were also carried out throughout the research process. The primary investigator discussed various health-related issues with the jail's Deputy Superintendent, Visitation Officers, Correctional Officers, and Nurse Practitioner. The information provided by these individuals helped supplement the information provided by prisoners.

Findings

Definitions of Health

Many definitions of health exist. To be able to put the study's findings into context, we first asked participants to define what good health meant to them. Some explanations reflected more medical definitions of health, including the absence of disease or other conditions and not being sick. Other participants described health as a state of overall well-being or "feeling good about themselves," including physical, mental, emotional, spiritual, and environmental aspects.

My idea of good health is not being in the hospital all the time and running back and forth to doctors. (Male participant)

Respondent 1: Access to healthy food, exercise. Respondent 2: Physical, mental, spiritual. Respondent 3: A whole feel good type thing. (Female focus group) My idea of good health is... particularly within the confines of the jail... I think good health means that you shouldn't be overly concerned about your surroundings. That is, catching things from other inmates or from the surroundings themselves. (Male participant)

Participants' descriptions of health mirrored that of the most widely accepted definition of health from the World Health Organization,²⁶ which describes health not only as the absence of disease or infirmary, but as a state of complete physical, mental, and social well-being.

Health Status

One of the main goals of the current study was to assess the health status of female and male prisoners at the provincial level. Prisoners tend to have poorer health than the general population largely due to various behavioural and socioeconomic factors, such low incomes, education and employment, ¹⁴ as well as drug, alcohol and tobacco use. ⁹ A recent report on the health of federal prisoners in Canada showed high rates of illness and disease among this population. ⁴ To determine the level of health among prisoners in provincial custody, we asked participants to rate their overall physical and mental health. We also asked survey respondents to report the number and type of health issues they had experienced in the previous 12 months. Overall, the findings demonstrated high rates of physical and mental health issues among provincial prisoners, with females reporting more health issues and poorer overall health than male prisoners. In the following section, we discuss some of the most prevalent physical and mental health issues reported by participants, as well as factors influencing prisoner health during incarceration.

1. Physical Health

In general, the majority of participants (63%) surveyed thought their physical health was good or very good at the time of the study. Men (81%) were more likely than women (65%) to rate their physical health as good, very good, or excellent. Women, on the other hand, were more likely than men to rate their overall physical health as being fair and were more than twice as likely as men to report poor physical health. Previous studies have also found that women in prison tend to have more health problems than male prisoners, largely because of histories of abuse, alcohol and drug dependency, and poverty. Aboriginal prisoners (78%) were somewhat more likely to rate their physical health as poor than non-Aboriginals (73%).

While a majority of male and female participants considered themselves to be in good physical health, they reported a number of health issues (see Figure 1). This somewhat conflicting finding was also found among a sample of female and male prisoners in the United States. He when we looked at the data for female and male participants separately, we found that women experienced more physical health issues than men – reporting more physical health issues than male prisoners in 11 of the 18 possible categories. The most frequently reported physical health issues among all participants were those related to brain and nervous system, skin, muscles and bones, eating, stomach and bowels, mouth, physical pain, and injury. Men and women reported markedly different levels of sexual and reproductive health issues, with female prisoners reporting more of these types of issues than males. Chronic and infectious diseases were not as prevalent among the prisoners as other physical health issues.

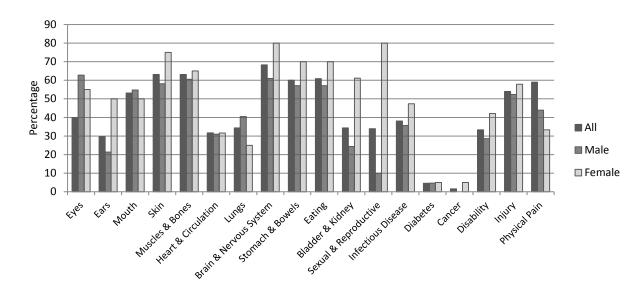


Figure 1. Physical Health Issues Reported by Prisoners by Category and Sex

a. Brain and Nervous System

Issues with the brain and nervous system, including headaches, dizziness/fainting, seizures, blackouts, as well as forgetfulness and memory loss, have not been widely reported in previous studies on prisoner health. Yet, these types of issues were the most frequently reported physical health issues in our sample, occurring in 68% of all survey respondents. A large percentage (59%) of prisoners reported headaches. When we looked at the data for males and females separately, we found that males (61%) were somewhat more likely than females (55%) to report headaches. On the other hand, female prisoners reported higher rates of dizziness/fainting, seizures, blackouts, and forgetfulness/memory loss than males. According to focus group participants, the high frequency of headaches could be attributed to the amount of fluorescent lighting and little natural light in jail, the stress of incarceration, and the controlled use of over-the-counter pain relievers by health professionals.

I had migraine headaches because it was my first time being in jail." (Male participant)

Respondent 1: You're not allowed to have headaches in the afternoon.

Respondent 2: I asked for Tylenol™ in the afternoon and they [nurses] were like, "No, you can just get that in the morning." I didn't have a headache in the morning. She was like, "Well, too bad."

(Female focus group)

b. Skin

Although not frequently discussed in the literature on prisoner health, the second most prevalent physical health issue in our study was skin problems, reported in 63% of all those surveyed. Most notable were dry skin and rashes. More women (75%) than men (58%) had issues with their skin – with females reporting more cases of acne, rashes, and dry skin. During the focus group discussions, male and female participants talked a lot about skin problems, particularly the prevalence of lice and scabies in jail, as well as unidentified rashes and "red bumps" on their bodies.

Respondent 1: A lot of people seem to pick up bugs... They almost seem like little worms that get into your skin and you end up with a pimple or whatever. You get rashes on your arms and stuff like that.

Respondent 2: Yeah, I got a rash when I first came in.

Respondent 1: You get rashes on your wrists because there is people spitting on walls. (Male focus group)

Respondent 1: We're getting bit by stuff, like real bad and it itches real bad and you start scratching, so you got little...

Respondent 2: I can show you right there. There, there, [and] there...

Respondent 3: Yes, little tiny bites. We don't know what it is. I have one on my foot right now. (Female focus group)

Female and male focus group participants attributed the number of skin issues to the living conditions at the jail. Prisoners shared close living spaces with the others, including cells, showers, and recreation areas, which according to participants were not always cleaned properly to prevent the spread of infection. Focus group participants also said laundry services were not monitored closely enough to prevent the spreading of contagious parasites and skin diseases from transferring to clothing and bedding. Poor air quality, lack of natural light, and unsanitary conditions, such as food and sewage in the cells were also said to contribute to the abundance of skin issues experienced by provincial prisoners.

c. Muscles and Bones

In a report on the health of federal prisoners, ⁴ the extent to which prisoners experienced issues with muscles and bones was not reported. We asked participants to report on issues related to their muscles, bones, joints, as well as arthritis and problems with their backs. Issues related to muscles and bones were one of the most frequently reported physical health problems, occurring in 61% of all participants. Focus group participants said that the cold, damp climate of the jail contributed to increased symptoms associated with arthritis. Both males and females said that they experienced a lot of pain, cramping and seizing of their joints during incarceration.

I was in physiotherapy for a year and a half. I was in a head on collision and I've got degenerative discs and a couple other things wrong with my back. (Male participant)

I have osteoarthritis... I'm starting to feel it. My fingers are starting to give out on me and my hip is starting to give out on me. (Female participant)

d. Mouth

In Canada, the extent to which prisoners experience oral health problems is not known, although the generally lower socioeconomic status of prisoners suggests that these types of issues would be higher in prisoners than the general population, because of less access to nutritious food and health care. In our study, issues related to the mouth, including teeth and gums, occurred in 53% of all survey respondents. Female and male prisoners were equally as likely to experience problems with their mouth. Male (48%) and female (45%) prisoners reported similar amounts of teeth problems. However, more women (25%) than men (14%) had problems with their gums. Focus group participants, both the women and men, discussed mouth problems at length, reporting minor issues such as the discoloration of their teeth and more serious issues, such as abscesses, tooth decay, and infections. According to participants, one of the reasons why teeth and gum issues may have been so prevalent was that they did not have the tools

necessary for good oral hygiene. Participants said that the quality of toothbrushes issued to them was poor. Those who had the financial resources to purchase luxury items in the jail canteen, such as better quality toothbrushes and toothpaste, reported better oral hygiene.

And toothbrushes, the ones that they give you here, if you've got no money to get a canteen card, it turns into mush after about two or three uses, which is no good for your teeth. (Male participant)

e. Stomach, Bowels and Eating

We did not find any studies that specifically reported on physical health ailments related to the stomach and bowels, including such issues as constipation, diarrhea, nausea/vomiting, and heartburn. Over 60% of all female and male prisoners surveyed reported gastrointestinal health issues and an equal percentage of participants had problems associated with eating. The most common eating problems were an increase in (38%) or loss of (33%) appetite. When we looked at the data for females and males separately, we found that females (70%) were more likely to report issues with eating than males (57%), which is consistent with the literature. With respect to diagnosed eating disorders, more females (15%) than males (0%) were bulimic. Equal numbers of females (15%) and males (14%) reported issues with binge eating and none of the participants were anorexic. According to female and male focus group participants, eating problems were largely due to lack of choice and control over their diets in jail and the overall poor quality of the food served.

I've had this disorder all my life, like since I was 14 years old and now it's bad again because of the fact that I can't eat what I want to eat, which causes the eating disorder to flare up so then, like, I get sick, right. I don't make myself sick, it just happens because mentally I can't stand it, so then I'm starving all day. So when it comes time to eat, I'm like a scavenger eating and then I'm sick and then it's like I'm literally starving. It sucks because I was doing good at that [before coming to jail]. (Female participant)

f. Injuries and Physical Pain

Physical pain and injuries are common among prisoners. The health study on federal correctional facilities found that prisoners experience an abundance of injuries.⁴ Over half of all the participants (54%) we surveyed reported injuries, which included bruises, cuts, sprains, breaks, and/or head injuries. Female prisoners were more likely than males to have bruises or cuts, whereas the men were more likely than the women to report sprains, fractures, and/or breaks. Female and male non-Aboriginal participants (60%) reported substantially higher rates of injury than Aboriginals (22%). In addition to injuries, nearly 60% of female and male prisoners in this study had experienced physical pain in the past twelve months, many chronically and long-term. The percentages for physical pain were similar for both Aboriginal (57%) and non-Aboriginal (60%) participants. Focus group participants did not offer any insight into the reasons why many prisoners experience high rates of injury and physical pain. Features of the jail environment, such as violence, overcrowding, and isolation have been shown to impact the health status of prisoners, ¹⁵ which may help explain the frequency of injuries and physical pain reported by participants in this study.

g. Chronic Diseases

Under the category of chronic diseases, we included cancer, cardiovascular disease, diabetes, respiratory issues, and obesity. Rates of chronic diseases among federal prisoners, including diabetes, cardiovascular disease, and asthma, have been shown to exceed those in general population.⁴ Little is

known about the extent to which cancer occurs in prisoners. In our study, cancer was the least prevalent of all physical health issues among participants surveyed, occurring in only 2% of our total sample. In addition, diabetes was only found in 5% off all participants. Cardiovascular disease (heart and circulation), was reported in 32%, with equal numbers of males and females reporting these types of physical health problems. Respiratory issues (lungs) were reported in 34% of participants. This was the only category where male prisoners reported more physical health issues than females, 41% and 25% respectfully. While males and females were equally likely to have asthma or allergies, male prisoners reported more infections, pressure, and pain in their lungs, as well as shortness of breath and/or an inflammation such as bronchitis. Both Aboriginal and non-Aboriginal prisoners reported equal rates of respiratory issues. Among focus group participants, respiratory issues were said to be prevalent because of poor air quality. Overweight and obesity was reported in 42% of all participants surveyed, whereas 45% characterized their current body weight as healthy. Female prisoners (50%) were more likely than males (37%) to consider themselves overweight or obese. Aboriginal (79%) were more likely than non-Aboriginals (35%) to report being overweight or obese. Overweight and obesity, according to participants, was largely due to changes in diet and exercise during incarceration.

h. Infectious Diseases

Prisoners in federal correctional facilities have been found to have elevated rates of infectious diseases, including bloodborne diseases, sexually transmitted infections, and tuberculosis, largely because many participate in high risk activities, such as intravenous drug use and unsafe sex practices. In this study, 34% of survey respondents reported at least one infectious disease. Almost half (47%) of all female prisoners surveyed said they had an infectious disease, which was considerably higher than male participants (36%). Non-Aboriginal prisoners (42%) were considerably more likely than Aboriginal prisoners to report having an infectious disease in the past 12 months. Less serious types of infectious diseases included signs of infections and influenza, which were reported by 10% and 2% of all participants respectfully. Hepatitis B and/or C were reported by 27% of participants, 32% of females and 24% of males. These rates are somewhat higher in comparison to a study that found that 29% of female and 17% of male prisoners in a Central Canadian provincial jail had Hepatitis C.²³ None of the participants disclosed having tuberculosis, HIV/AIDS or any other sexually transmitted infections despite the fact other studies show prisoners have a substantial risk of being infected both prior to incarceration and while in jail.⁴ Given the highly personal and sensitive nature of these types of health issues, participants may not have felt comfortable disclosing such information on the survey. In addition, participants may not have been tested for such issues and be unaware of their status.

i. Sexual and Reproductive System

The most obvious difference in the physical health of men and women was with respect to sexual and reproductive health issues. Eighty percent of females surveyed had experienced one or more issues within this category compared to only 10% of male prisoners. Miscarriage/abortion (35%) was the most frequently reported issue among women in this category, followed by difficulties with menstruation (25%) and menopause (15%), infections (20%), and/or pregnancy (15%). Aboriginal prisoners (56%) also reported significantly more sexual and reproductive health issues than non-Aboriginals (31%). This was the only category where visible physical health differences were observed between Aboriginal and other prisoners.

Sexual and reproductive health issues were discussed at length by female focus group participants. In general, women were more likely than men to be responsible for sexual and reproductive health in

relationships, including birth control. The majority of women in the focus group were in their reproductive years and had concerns about menstruation, birth control, and pregnancy. During the focus group, the women said that they did not have access to birth control in jail and were fearful of the repercussions this could have once they were released (e.g., unwanted pregnancies). Most were serving short sentences and would soon be returning to the community and their sexual partners.

My birth control method that I had is supposed to last five years. And when I came in, it came out, the birth control. The IUD came out. So I mentioned it to her [nurse practitioner], because I'm only here for a couple of months, and I've had 5 pregnancies. So I said, "Can I go see my doctor?" For one, this is supposed to last 5 years it shouldn't have came out. And for two, I'm not going to have another kid. And, "No, you're not going to get pregnant while you're in here," was the response. "You can't get pregnant while you're in here so don't worry about it." But I mean even birth control methods when you get them; it takes about a month or so to kick in. And I'm in a relationship and I don't want to have another kid. But I can't even go to see why it came out. (Female participant)

Female focus group participants also said that regular sexual and reproductive health screening, such as pap tests and mammograms, as well as yearly physicals were not available to women at the provincial jail. It is unclear if this is also the case in federal prisons, as availability and access to sexual and reproductive health screening is not often discussed in the literature. Our findings do, however, support claims that reproductive health care may be limited or unavailable to women in prison.²⁹

I was scheduled for a mammogram before I came here. It's my first one and I haven't got it. I asked them and they said "We don't do that here." But I'm here and my boobs are here. You know what I mean? They've got to do that. Why don't they? (Female participant)

In the current study, female participants also reported difficulties in accessing basic personal hygiene needs such as tampons and sanitary pads during menstruation, which were not allowed to be stored in the cells for security purposes, as well as clean underwear. Women said they had to rely on guards, most of whom were male, to provide such items when they asked for them and according to female participants, staff rarely responded to requests in a timely fashion. Participants felt that having to ask for such personal items in front of staff and other prisoners was a violation of their privacy, as well as a degrading and humiliating experience.

But sometimes you can't get panties. You've got wait until they get them for you. Sometime you have to wait hours for them. When you ask for them, sometimes they are not... You've got to stand there, man, and wait and wait and wait for them. And then you know, Mother Nature don't wait. (Female participant)

According to female focus group participants, pregnant women received little care on the inside. They described pregnant women as being "pretty much on your own" without any regular medical check-ups, healthy pregnancy information or counselling to deal with the stress of being pregnant in jail. They were, however, given an additional pillow and mattress, more pieces of fruit and glasses of milk, prenatal vitamins, and regular weigh-ins. The findings support the literature, which reports limited pre- and post-natal care for women in prisons.²⁹

There's this girl in here and she's supposed to be having her baby. The doctor kept putting it off... So she's waiting, waiting, waiting. She's in jail. She's just stressed to the nuts. I mean come on; an extra fucking banana ain't going to help! (Female participant)

In connection with sexual and reproductive health issues, a substantially higher percentage of female prisoners (61%) reported bladder and kidney issues than males (25%). However, the fact that one quarter of all men reported these kinds of health issues should not be overlooked. The most common bladder and kidney issues were infections or urinary problems (22%). Explanations for the prevalence of bladder and kidney issues were not provided by participants. More research in this area is needed.

2. Mental Health and Substance Use

There is a substantial body of literature highlighting the prevalence of mental health issues and substance use in prison populations, ⁹⁻¹¹ including federally sentenced prisoners in Canada. ⁴ Female prisoners have been found to have higher rates of mental health issues than male prisoners. ^{4,13} While we were primarily interested in learning about the physical health status of provincially incarcerated men and women, we did not want to ignore the important role mental health plays in overall health and well-being. Therefore, as part of our assessment of the health of prisoners, we asked participants to rate their mental health. In general, the majority of participants (64%) thought their mental health was good or very good on the day of the survey. Men (95.5%) were much more likely than women (60%) to rate their overall mental health as being good, very good, or excellent. Women, on the other hand, were more than three times as likely as men to report poor mental health. Furthermore, when we looked at differences among Aboriginal and non-Aboriginal prisoners, both rated their mental health similarly from fair to excellent, but Aboriginal prisoners (11%) were more likely than non-Aboriginal prisoners (7%) to report poor mental health.

Despite reporting overall good mental health, when we looked at the quantity and type of mental health issues experienced by participants, the percentages were extremely high. According to the survey results, 79% of all participants reported mental health issues within the previous 12 months – 95% of female prisoners and 70% of male prisoners. More than 50% of all those surveyed were depressed or suffered from anxiety. We found that female prisoners were more likely than men to experience higher rates of stress, sleeplessness, anxiety, depression, mood swings and self-harm than male prisoners. Female and male participants were equally as likely to have received a formal diagnosis by a health professional. The findings are similar to previous reports on the mental health of prisoners, which have shown that over 90% of all prisoners have a mental disorder and that female prisoners experience more mental health issues than males. Focus group participants did not engage in many discussions around mental health, probably because of our focus on physical health, but over the course of the discussions they did mention that conditions of the jail environment contributed to high rates of mental health issues among prisoners, including isolation and overcrowding.

Included in the section on mental health was alcohol and substance use. Previous studies in Canada have shown that federal prisoners tend to report higher rates of alcohol and/or substance problems than the general population. A systematic review on the prevalence of substance use and dependency in federal prisoners ranged from 10% to 48% in male prisoners and 30% to 60% in female prisoners. Estimates of prevalence for alcohol use and dependency varied from 18% to 30% in male prisoners and 10% to 24% in females. Federally sentenced women, especially those of Aboriginal descent, report both

higher rates of drug use and the use of harder, more addictive types of drugs than male prisoners. Alcohol and substance use was the leading self-reported health issue for men and women in our study. Similar rates were reported for both men (93%) and women (90%). There were major differences, however, in the types of substances they used. Male prisoners (57%) were more likely than females (40%) to have a history of alcohol use. On the other hand, female participants (85%) reported higher rates of tobacco use as compared with males (64%). In addition, women reported more drug use than men, including illicit and prescription drugs. Women (45%) were also more than twice as likely as men (21%) to use intravenous drugs. Higher rates of drug use among female prisoners were consistent with the findings from previous studies with federal prisoners. As well, our findings showed higher rates of alcohol and substance use among females and males than federally sentenced prisoners. In contrast to the literature, however, Aboriginal (89%) and non-Aboriginal participants (93%) reported similarly high rates of alcohol use.

3. Changes in Health

Not only were we interested in the prevalence of health issues among prisoners, but we also wanted to know if their health had changed since coming to jail, and if so, how. Sixty-four percent of participants noted a change in their overall health during incarceration (see Figure 2). Thirty-eight percent of participants observed an improvement while 27% reported a decline. When we looked at the responses of female and male prisoners who had experienced a change in their overall health, we noticed a difference between the two groups. Female participants were more than twice (40%) as likely as males (19%) to report deterioration of their health during incarceration. The most noticeable difference observed was in the percentage of female respondents (20%) who said their overall health had gotten much worse compared to men (2%). Changes in overall health among Aboriginal participants and non-Aboriginals were fairly similar.

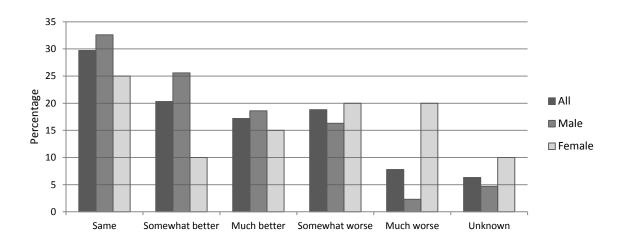


Figure 2. Changes in Health since Incarceration

4. Factors Influencing Health

The survey and focus group findings highlighted the importance of taking into account how healthy prisoners were prior to incarceration when interpreting overall changes in health. While a number of

13

participants reported a decrease in health, 67% of those surveyed thought their health had either remained stable or improved since coming to jail. What we learned from the focus group discussions was that improvements (or no change) in prisoners' health did not mean that their health was good. It simply meant that it was better than it had been before jail, which could still be relatively poor. The focus group findings showed that changes in health were largely measured by changes in weight. A number of factors were demonstrated to influence weight and perceived overall health, including nutrition, physical activity, substance use, and environmental conditions.

a. Weight

Weight played an important role in overall health and well-being. The majority of participants (64%) surveyed experienced either an increase or decrease in their weight during incarceration. A greater proportion of women (80%) had gained weight in comparison to men (55%). Additionally, non-Aboriginal participants (64%) were more likely than Aboriginal prisoners (56%) to report an increase in their weight during incarceration. We found that variations in weight were used by participants to gauge changes in their overall health during incarceration. There were four main factors participants identified as contributing to changes in their weight and subsequent overall health: nutrition, physical activity, substance use, and environmental conditions.

b. Nutrition

Healthy eating is important for maintaining good health and preventing chronic health issues such as obesity, diabetes, heart disease, and cancer. Nutrition was a key factor in perceived levels of health among survey and focus group participants. Seventy-seven percent of all those surveyed said that food played a significant role in whether or not their weight had changed since they came to jail. Focus group participants said they either gained or lost weight because of the poor quality of food served.

I weighed 95 pounds three weeks ago. I gained 30 pounds in... three weeks today. I've gained 30 pounds and I have an eating disorder that has been going great and it's flared up bad, like bad. (Female participant)

I lost... I was 196 at one point and now I'm like 170. So I lost 20 pounds just because I couldn't eat most of the stuff [they serve]. (Male participant)

Participants were aware that eating the amount and types of food recommended in Health Canada's Food Guide³¹ contributes to overall health and wellness. The diet participants described was not meeting these needs. Participants in all four focus groups said the food was largely carbohydrate-based, highly-processed, high in sugar, and low in nutritional value. They indicated receiving an overabundance of white bread per day, vegetables once per week, fruit twice per week, one glass of milk and several glasses of sugary powdered drinks per day. Upon review of the jail menu, we found that with the exception of meat and alternatives, the menu fell short of the daily recommended type of food and number of servings. Health Canada's Food Guide suggests 7-8 servings of vegetables and fruit per day for women and 8-10 for men. The prison menu included 1-2 daily servings of vegetables. Potatoes, including French fries, were the most commonly served type of vegetable. There was no record of the amount and type of fruit served. In regard to grain products, prisoners were frequently fed white sandwich bread, hamburger and hot dog buns, pancakes, turkey dressing, and lasagna, which did not meet the recommendation that at least half of all grain products be whole grain. A new provincial menu has been developed and shows improvements in the inclusion of whole grain foods. As well, the number of fruit and

vegetable servings appear to have doubled, but the total is still only half the amount recommended by Health Canada's Food Guide. It is also unclear when the new menu will be introduced.

In one day... For example, one day last week I got four pieces of bread in the morning, three at noontime, which makes seven, two at lunch time, so that makes nine, and a sandwich at night. And I was hungry again so I ate two more last night. That is almost a loaf of bread in a day... It's 13 pieces. (Female participant)

According to focus group participants, little attention was paid to allergies and special diets. Only diabetic prisoners received special diets, including more fruit. Vegetarian, low-fat, and low-salt options did not appear to be available, nor were special requirements for individuals receiving methadone treatment, who needed increased servings of protein, fresh fruits, vegetables, and water. According to participants, no provisions were made for prisoners living with HIV/AIDS and Hepatitis C, who need high-fibre, low-saturated fat, nutritionally balanced diets. Participants also said that meals were often served cold and that it was not uncommon to find foreign objects in meals, such as pieces of packaging and insects.

Not only was food a concern among participants, but so too was the quality of the water at the jail. Focus group participants reported that the drinking water was not safe to consume. Both males and females described the water as brown, yellow, and rust-coloured. Others said the water often had black and green sediment from the old plumbing pipes. The female focus group participants reported having a container to filter water to reduce sediments in one of the two female units. The men only had access to unfiltered tap water. According to participants, frequent boil water advisories occurred and this information was not always shared with prisoners. Many refused to drink the water because they were unsure about its safety.

The only way we knew about a boil order in [name of city] was to hear it on TV and we were still drinking the water out of the taps, you know. And you asked the guard for a litre of water, and it's like you are giving them a task to do. They don't like to be told what to do so they don't give it to you. So what do you do? You just go dry. (Male participant)

Respondent 1: The nurse didn't know that there was a boil order on and they were giving us the water...

Respondent 2: Everybody drank it. (Male focus group)

c. Physical Activity

In addition to nutrition, physical activity played a key role in the health and well-being of prisoners. Almost half of the women and men surveyed said that exercise was a contributing factor in changes in weight, which is how participants gauged changes in health. For the most part, male and female focus group participants said there was little opportunity to be physically active in jail, which contributed to weight gain. Alternatively, others found that jail provided more "free time" for them to exercise than when they were on the outside, which led to positive changes in weight. For example, several of the men said that they had lost weight as a result of being more physically active in jail than they were before. Other men had gained healthy weight due to increased muscle mass from engaging in such activities as weight-lifting. This particular gender difference was not surprising given that males are more likely than females to engage in weight training as a form of exercise.

Respondent 1: Exercise, I guess, mainly if we're given the opportunity.

Respondent 2: Yes, the fact that we get to work out 5 days a week

Respondent 3: We got a new gym system there with new weight machines and stuff.

Respondent 2: That is one good thing.

(Male focus group)

According to focus group participants, the two main opportunities for prisoners to engage in physical activities at the jail was during their allotted time outside in the yard (30 minutes/day) or indoors in either the gymnasium or exercise room (45 minutes/day). Female and male participants said they walked in the yard or did laps in the gym for exercise. Both also said they played recreational sports, such as volleyball, badminton and basketball, in the gymnasium. According to participants, the exercise room was just recently equipped with a new universal weight machine. One of the major complaints among female and male participants about physical activity, however, was that their ability to go outside or to the gym and exercise room largely depended on whether or not the guards wanted to take them. They felt that time outside of their cells was getting shorter and their health suffered as a result. Another issue both female and male participants raised was that the poor quality of their diets and lack of protein did not give them enough energy to engage in physical activities.

You aren't given much opportunity to do anything. You know what I mean? Like sometimes we don't even get our full 45 minutes in the gym or full half hour in the yard. Like, especially if it's storming out or raining or whatever, if the guards don't want to take us, we don't get to go. (Female participant)

Respondent 1: But what are you going to do for exercise if you're not eating right, you can't. You feel weak.

Interviewer: So you find that you don't have the energy to exercise?

Respondent 2: Yes, I'm feeling it.

Respondent 3: Oh my god, I've got none. I go to the gym and sit there.

(Female focus group)

d. Substance Use

In addition to nutrition and physical activity, focus group participants attributed changes in weight and their overall health to drug and alcohol use. Prisoners without a history of drug or alcohol use reported better health prior to incarceration and having both their weight and health diminish in jail. In contrast, individuals using alcohol, tobacco, and/or drugs felt they had poorer health upon entry into the correctional system and were more likely to report improvements in their overall health, as well as weight gain during incarceration. Focus group participants largely attributed improvements in health to not using drugs while incarcerated, as well as having regular sleeping and eating patterns as a result of being free of drugs. The survey results supported the findings from the focus groups. Participants who had a history of drug and/or alcohol use prior to incarceration were significantly more likely than those without to rate their physical health ($\chi^2(4)=8.63$, p<.10) and mental health ($\chi^2(4)=9.58$, p<.10) during incarceration lower. They were also significantly more likely than non-users ($\chi^2(4)=8.77$, p<.10) to say their overall health had improved since coming to jail.

But if you're not on drugs out there, you're already living healthy and eating all the time, and you're not always running around... and when you come in here, it's different, you start losing weight. (Male participant)

You know why you're losing weight? When you came in here, you' weren't on no drugs or nothing. You were healthy on the street. So then you come in here and you start losing weight. Me, you [points to another participant] and everyone else was all on drugs when we came in, right, so we would have gained weight. (Male participant)

Yes, I'd say my health is better too, because when I was out there, I was barely eating. I was off on dope. You know what I mean? I'm doing much better [now] than what I was on the street because I was off on drugs. (Male participant)

Grant it, I do believe that people could say that they are healthier now. But like I said, we've eliminated for the most part alcohol, drugs, and tobacco. They should be healthier. (Male participant)

e. Environmental Conditions

According to participants, other aspects of the physical environment influenced the overall health and well-being of prisoners. Focus group participants attributed changes in their health, including weight, to the living conditions in jail. One of the main environmental conditions affecting the health of prisoners was the absence of natural light and fresh air in jail, which was also discussed earlier.

We don't get the proper fresh air that's needed that's for sure. Depending on whether the guards want to take you out or not, if it's cold they will take you out for 10-15 minutes. (Female participant)

Getting outside for fresh air that is a big one, because I don't know if it's just me but I feel like my skin is getting thin. We live under these lights and I have my personal beliefs on how healthy that is. (Male participant)

I think people need to be outside more in more sunlight. I've seen some guys come out [of jail] and they are just white as a ghost... And that plays on... I mean they say, they have studies saying that if you don't get enough sun or in the wintertime you are more crappy. (Male participant)

Another environmental issue that arose was with respect to overcrowding. To meet accommodation needs, prisons often house more prisoners in a cell than the number of beds. This practice is commonly referred to as "double-bunking." Overcrowding was seen by focus group participants to be a health and wellness problem, particularly the men. Participants reported having to sleep on the floor, step over each other to move about the cell, use the in-cell toilet in the presence of others, and change their routines to accommodate the lack of space when they were double-bunked. For example, one participant said he did not exercise in his cell because there was no room. These issues have also been found to influence prisoner health and well-being in other parts of the world.³²

Respondent 1: And when you're double-bunked, you have about that much room [outlines a small area with his hands].

Respondent 2: You get enough to walk... and then people are coming in. If you have anyone coming in your cell they're walking over your bed that you're sleeping in...

Respondent 1: And 90% of the time, like a lot of the guards won't even let you out to go to the bathroom.

Respondent 3: You used to be allowed out like if you are double-bunked from like 11 am to 2 pm. Well, the other day, I was like, "Hey, can I get out to go to the bathroom?" and he [guard] said, "No, you'll have to wait until 2 pm." You can't wait from 11:30am.

Respondent 4: You don't want to use the bathroom in front of somebody else.

(Male focus group)

Another environmental factor that focus group participants discussed was unhygienic conditions in both their cells and the general living areas, which they believed had negative health implications. Participants said there was mould, decaying food, spit, blood, vomit, urine, and feces on the sleeping mattresses, showers, cell walls and floors. Female and male prisoners also said their health was further compromised by the backing up of sewer water. According to the focus group participants, and later verified by correctional staff, flooding frequently occurred when some prisoners flushed foreign objects down toilets and clogged the pipes. Several inches of sewer water would seep into the cells and cover the floors. Prisoners were locked in their cells with the exception of only a few hours a day – even during flooding. They would eat, sleep, and spend most of their days in these unsanitary conditions – for up to several days at a time. Participants said they were not allowed cleaning supplies to clean up the mess while it was occurring or sanitize their living spaces when the sewage water retreated.

You are right, that is one of the main drawbacks, is this goddamn flooding that we have all the time. And when you get that old sewer water when it's about 4 or 5 inches deep in your cell; that's not healthy. (Male participant)

When I came in here and I saw that people were made to remain in their room when they had about 3-3 ½ inches of raw sewage water... they were made to remain in their rooms, locked down for up to two days to sleep, to consume their meals in there. I thought for a brief time that it was...a nightmare. I didn't think that this was Canada and I was shocked. It wasn't something that I thought ever existed in Canada. I'm wrong. And that is why I came to do this study, was due to the fact that somebody needs to speak for the people that are living in these walls. (Male participant)

I do understand where I am. I do understand why I am here. But there are certain things that are beyond my control while I'm in here, I recognize that. But there are certain things that I shouldn't have a problem with. One of them is the concern for my health. I live in Canada. This is 2010. Why am I living in sewage? Why am I living in a swamp? Why am I locked into a room where I can't walk through the door because there's 3 ½ inches of water and there's actual feces floating in the water? Why do I have to spend 2 days locked in that?

While unhygienic living conditions were discussed by both female and male focus group participants, the topic was more pronounced among male participants, especially flooding issues. This was largely because the male units were more likely to be flooded due to their location.

Health Services

In addition to the health status of prisoners at the provincial level, we examined health services. In Canada, it has been demonstrated that federal prisoners use health services frequently in federal prisons.⁴ To see if these findings were similar among provincial prisoners, we asked participants about the types of health services available in jail, as well as why and how frequently they used health services.

We were also interested in learning about participants' experiences with health services, asking them how they felt about the services they received and the way they were treated by health professionals and correctional staff. We found that a large proportion of participants used health care services during incarceration, despite saying that there were few services available and that it was difficult to access such services. In addition, participants were largely dissatisfied with the available services and reported them as being of poorer quality than community-based health care. The following section describes these findings.

1. Available Health Services

In order to get a sense of what health services were available to prisoners during incarceration, we consulted with the nurse practitioner. At the correctional facility, one nurse practitioner, who is qualified to diagnose, treat, and prescribe medication, is employed full-time. Her office hours are typically 8am to 4pm Monday through Friday, during which time prisoners can seek appointments. According to the nurse practitioner, prisoners are encouraged to submit written requests, but they can also ask a nurse during rounds or a correctional guard at any time to see her. Depending on urgency, participants are seen immediately or at a later time. The nursing staff makes rounds on the units four times a day for medication delivery. They are also available to see prisoners at the health services unit for assessments and procedures such as blood pressure, dressing changes, suture removal, diabetes monitoring, and more. A physician is available to the nurse practitioner by phone between the hours of 8am and 11pm daily. The physician is also on-site three to four hours a week, mainly to consult with the nurse practitioner, but also to see patients. Prisoners are taken to the local hospital when necessary. Mental health services are screened through the nurse practitioner. She provides services for less serious mental health issues and offers informal counselling. For more challenging cases, as well as for assistance in long-term interventions, such as dialectical behaviour therapy, the nurse practitioner consults an off-site Forensic Team. Psychologists and Psychiatrists are not available at the jail. Courses related to mental health, such as anger management, are offered intermittently. Methadone treatment is available at the jail, but only as a maintenance program for prisoners who were already receiving it prior to incarceration. Alcoholics Anonymous groups ran at the jail on a bi-weekly-basis. Dental care is provided off-site. Each week one prisoner is allowed to see the dentist and emergency dental surgery is provided in the community on a needs-basis.

Based on reports from staff, there are a range of services available to prisoners. When we talked to the prisoners themselves, however, we got a much different picture. There was a lot of contradiction and confusion around what was and was not available. Some focus group participants told us there were no services available at all. Other participants named some of the services the nurse practitioner told us about, but left out others. For example, female and male focus group participants said there was no counselling available, but according to the nurse practitioner she offered informal counselling. They did say, however, that mental health programming such as anger management, Alcoholics Anonymous, and methadone was available. As another example, some participants said they had seen the doctor since they had been in jail, others had no idea that there was a doctor at the correctional facility. Those who had been seen by the physician said it was largely for consultation with the nurse practitioner, as she reported, and that the doctor did not physically examine them. Participants found it problematic that they did not have, or have enough, access to a physician.

For the most part, participants said that services were available, but they were difficult to access and there were not enough to meet prisoners' needs. While we describe accessibility and quality of health services in more detail further in the paper, one example to illustrate this point is dental care. The demand for dental care was greater than what was offered. As we reported earlier, over half of all participants in our study reported issues with their mouth, including teeth and gums. As the nurse practitioner pointed out, only one prisoner per week was allowed to go to the dentist. A large proportion of participants who needed to see a dentist were not able to do so. In addition, any prisoner who required more than one visit, as is often the case with many dental issues, rarely had the opportunity to do so due to length waiting lists, as provincial prisoners typically serve short sentences. As a result of these shortcomings, participants were dissatisfied with the level of dental care provided. Another major reason why participants said few services existed was because it was difficult to see the nurse practitioner despite the fact that she was there five days a week. As one male participant said, "getting down there is the problem." Furthermore, according to participants, when they were taken to the health services unit it was often difficult for them to communicate their health concerns with the nurse practitioner. Many also said they were sent back to their cells without receiving any care. We did not follow up on the reasons participants may not have received care and more information is needed.

Respondent 1: You're lucky to get down there [to see the nurse practitioner]. That is basically the problem.

Respondent 2: Yes, I'm just happy that she got my request and that I'm going down to see her. Respondent 1: Yes, and then sometimes you get down there and they are just like, "Well, sign here. I can't do nothing for you" and then you just walk back. That is basically what happens to everybody. (Male focus group)

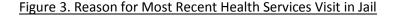
Increasing the number and availability of health services to match the type and frequency of physical and mental health issues experienced by prisoners at the jail, such as those we reported in the previous section, may help address prisoners criticisms that few services exist. In the end, it may not be that "no services" exist, as some participants said, just not the "right ones" or enough of the "right ones" to meet their needs. In addition, educating prisoners on the role and qualifications of nurse practitioners may prove beneficial in making them aware of the type and quality of care available at the jail. It is possible that participants simply did not know that nurse practitioners can diagnose, treat, and prescribe medications the same as a doctor. It is also important that prisoners receive accurate detailed information from the correctional facility about the health services offered to negate any confusion about what is available.

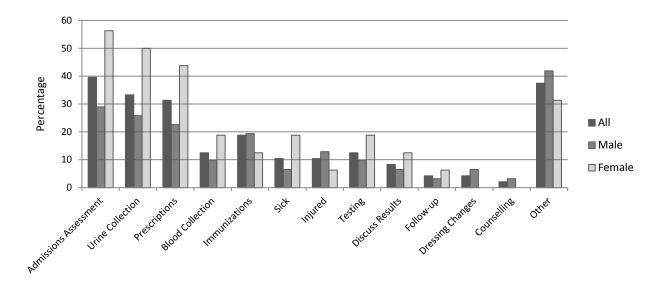
2. Use of Health Services

In addition to the type of services available, we were interested in the use of health services among provincial prisoners. We first asked participants whether they had a need to use health services during incarceration. Sixty-six percent of all participants said yes. Female participants (72%) were more likely than males (63%) to report that they required health services, although we should not discount the high proportion of males reporting a need to use health services. Aboriginal prisoners (78%) reported a greater need for health services than non-Aboriginal (64%). Need for health services were not discussed among focus group participants, except within the larger context of experiencing health problems. The high prevalence of health issues among prisoners in general, and in particular female and Aboriginal prisoners, may account for the large proportion of participants surveyed having a need to use health services during incarceration.

We then asked participants if they had used any health services. We found that an equal percentage of participants who needed services had used at least one health service since coming to jail (67%). Female respondents (82%) were more likely than males (60%) to have sought out health care during incarceration, which may have been linked to females reporting more physical and mental health issues than male prisoners. There was only a slight difference in use between Aboriginal and non-Aboriginal prisoners, with Aboriginals (63%) being less likely to use health services than others (68%). No information was provided during the focus group to elaborate on this finding.

Increased utilization of health services among prisoners can be expected for several reasons, including: greater need due to lower socioeconomic backgrounds, higher prevalence of health conditions, administrative assessments imposed by the correctional system, greater supervision and control of medications by the correctional system, and increased access to care in jail. These factors may have also played a role in the use of health services by prisoners in this study. As discussed earlier, participants largely came from lower socioeconomic backgrounds and reported a number of physical and mental health issues. In addition, the three main reasons participants gave for using health services was because of general assessments required by the jail upon admittance and for medication-related issues, such as prescriptions and urine collection, which is often a requirement for methadone treatment (see Figure 3). Therefore, it appears that prisoners use health services largely for reasons mandated by the correctional system rather than to treat illness or discomfort. In regard to increased access to care in correctional facilities, we did not ask if participants had increased access to care in jail as compared to when they were living in the community. More research in this area is needed.





3. Access to Health Services

In addition to availability and utilization, we were also interested in accessibility, as it is not frequently reported in the literature. According to the survey data, only a small number of males (2) and females (4) were able to get the help they needed every time they had a health issue. Most (60%) reported that they were only able to access health services some of the time, of which 27 were male, 10 female, and eight Aboriginal. Twenty-seven percent of all survey respondents said they never had access to care when they needed it. Female prisoners (35%) were more likely than males (24%) to say they never received the care they needed.

During the focus groups, female and male participants said it was difficult to access health services in jail. They reported that written requests for care were often ignored or misplaced. According to participants, wait-times to see a health professional were long, taking up to several days and even weeks to see the nurse practitioner after submitting a request. Lengthy waiting lists have also been found to occur in a number of provincial jails across the Atlantic Region, including the jail where this study took place. Focus group participants, both male and female, also said that only concerns deemed to be an emergency were dealt with promptly – and even then some prisoners with serious and acute health issues, such as severe physical pain and abdominal issues, waited a day or more to see a health professional and receive care. The challenges participants repeatedly encountered resulted in many of them choosing not to submit further requests and to go without care.

I had a sore throat and a sore ear and I thought I might have a throat infection. I sent a request and it was five days before I got to see... (Female participant)

I put in three requests for antibiotics because I had a sinus infection. And I don't know where it went. It's still in there some place. I mean I've had like seven or eight abscesses on my face. I'm just waiting for another one to break out. And I still haven't got to see the nurse about it yet. (Male participant)

I've asked for health for a couple of things for the last two weeks that are very important, which I haven't heard nothing back from. Zero, nothing. And the more you put in a request, the more they push it aside because they think you are being a bitch and bugging them. But you're not. You just want some god damn help from them. But you're not getting it. (Female participant)

My kidney was bad, like it was cracked in half inside me. I'd have to say that was pretty serious. I started pissing blood one day and they [guards] just told me to go lay in my room at first. They said, "Go lay down." I woke up the next day and I couldn't move. I literally couldn't move. They took me to the hospital then. (Male participant)

We also heard that because health services were not adequately meeting the needs of prisoners, participants resorted to peer support and self-diagnosis. For example, participants said they often talked with other prisoners about their health issues and possible conditions causing their symptoms, because they were unable to see a health professional. From these conversations, many participants diagnosed their own ailments. Peer support was especially prominent among female prisoners. During the focus group, the women talked about informally supporting each other about medical problems and pregnancy, as well as when they were emotionally upset over such subjects as isolation, relationships, and personal histories of violence/abuse, substance use, and criminalization.

Respondent 1: There should be some kind of psychiatrist in this place.

Respondent 2: Yes, there should. Respondent 3: Someone to talk too.

Interviewer: So there is no counselling available?

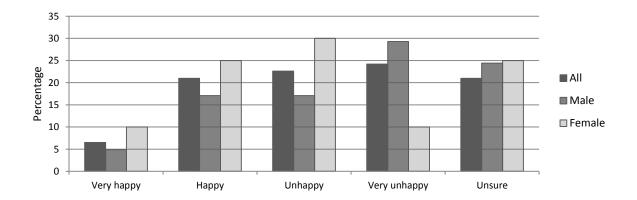
Group Response: No.

Respondent 3: We counsel each other.

4. Quality of Health Services

In addition to availability, utilization, and accessibility, we examined the quality of health services in jail. In our assessment of the quality of health services, we asked participants how satisfied they were with the services available during incarceration (see Figure 4). According to the survey data, more participants were dissatisfied (44%) than satisfied (28%). When we looked at the responses of female and male participants, we found that nearly half (46%) of all males and 40% of females who had used at least one health service during incarceration were displeased with the level of healthcare offered.

Figure 4. Participant Satisfaction with Health Services



Over 60% of participants felt that health services in jail were inferior to community-based healthcare (see Figure 5). Almost half of all the men and one quarter of the women who took part in the survey reported the health care they received in jail as being "much worse" than community-based healthcare. According to participants, lack of access and the poor quality of health services, which we describe below, were the main reasons why participants rated the level of health services in jail worse than what is available in the community.

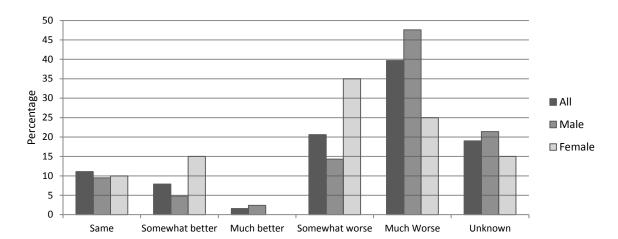


Figure 5. Level of Health Care Services in Jail vs. in the Community

In addition to general satisfaction levels with health services, we also asked more specific questions about the quality of care being provided at the jail, including whether participants felt comfortable and respected when using health services, and if they felt their issues were taken seriously and kept private. According to the survey data, 75% of participants were not always comfortable using the jail's health services. Female prisoners (20%) experienced more discomfort overall and were more likely than males (14%) to never feel comfortable. Much of the discomfort female participants experienced was related to the personal nature of sexual and reproductive health concerns, as well as accessing products during menstruation. The women found it especially difficult to address their health concerns with correctional guards, who were mostly male, when requesting care.

Sometimes you lie and say you've got a toothache when really you've got some other big problems, because you don't want to be embarrassed about what [your health issue is]. (Female participant)

There also appeared to be concern among participants that their health was not being taken seriously by correctional personnel, which is consistent with previous research. According to the survey data, over half (51%) of all participants felt they were only taken seriously some of the time and 32% never. More males (36%) than females (25%) felt that their health concerns were not taken seriously by staff. Female and male focus group participants talked about being ignored and in some cases laughed at by correctional guards when they reported a need to see the nurse or nurse practitioner. According to participants, inadequate attention to the prevalence and seriousness of their health concerns by guards and health professionals resulted in delayed care or none at all. Lack of sincerity and respect were closely linked. The majority of survey respondents (60%) said they were not always treated with respect by health professionals and correctional guards. More males (20%) than females (10%) reported feeling disrespected when it came to health issues and seeking appropriate services. Aboriginal participants (22%) felt they were not treated with respect more often than other prisoners (16%). The focus group discussions did not lend any reasons as to why males and females, as well as Aboriginal and non-Aboriginal prisoners, perceived to be treated with varying degrees of respect. More research in this area is needed.

And they [guards] think, "Oh, you just want a break from your cell." Well, you know what, I'm 50-some years old and I don't play these little games. I don't have time for these little games and none of

us are doing it just to get out. It's just maybe a two room walk to the nurse. I mean it's not a joyful [experience]... It's not. (Female participant)

For example, the kid there the other night, 34 years old, he had chest pains, and like I said the guard just laughed at him. I mean he should have been brought right down to the nurse right then. (Male participant)

Confidentiality was said by focus group participants to be a major barrier to accessing health care in jail. Only 28% of those who participated believed that their health concerns were kept private by health professionals on a regular basis, while 31% felt this was the case only some of the time, and 25% never. Female prisoners (32%) were more likely than males (24%) to feel as though their confidentiality had been compromised. The process of requesting and visiting health services was described as a violation of their privacy, because they were asked to verbally explain their problems in front of correctional staff and other prisoners, or detail them on request forms, before they could see the nurses or nurse practitioner. Throughout the focus groups, it was evident that prisoners overheard private conversations, as they talked openly about the health ailments and diseases of other prisoners; many of whom said they had never talked one-on-one with the person. When prisoners visited the health services unit, female and male participants said guards were also often in the room or just outside the open door. According to participants, often times the guards would share information from requests and examinations with other staff. For example, many recalled having conversations with guards about issues they were certain they had not told them. Female focus group participants said they found it particularly difficult to disclose sexual and reproductive health concerns and the need for hygiene products, such sanitary pads and clean underwear, in the presence of guards and other prisoners. Participants felt that their health concerns should be known only to themselves and their health care professionals, not the guards or other prisoners.

Interviewer: You were saying sometimes you don't want to ask for things. Is it like that when you have health issues too?

Respondent: Yes, because you say you want to see the nurse. Well, you've got to write out a detailed thing about what is wrong with you. The guard's got to read it and then this guard's got to read it. Fuck, by the time it gets to the nurse, like, oh man, you are just way embarrassed. (Female focus group)

Respondent 1: Let's say you've got a problem. Before you write it on the request slip, the nurse will say, "Well, what is your problem?" And then everybody is standing there. They'll hear what you've got to say.

Respondent 2: If you get escorted down to the nurse practitioner, the guard that is escorting you stands right at the door.

Respondent 3: Well, not even that, the guard will say, "Is it important enough?" And if you say "yes," they are going to want to know how important it is before they even take you.

Respondent 2: Yeah, they are going to want to know about it when it should be between you and the doctor.

(Male focus group)

Respondent 1: And then when you go see the nurse practitioner, you have a guard at the door. Respondent 2: Yes and the guard sometimes comes right in with you. So they know exactly what is... and, you know, it's... like, I don't know you from a hole in the ground. Why do I want you to know my business?

(Female focus group)

The degree to which participants felt uncomfortable accessing services, disrespected and not taken seriously by health professionals and guards, and that their privacy was compromised may help us better understand why participants were largely dissatisfied with health services during incarceration and why they rated these services poorer than community-based health care.

Summary and Conclusion

In a sample of 65 female and male prisoners in a provincial jail, we examined health status and health services. We found that while prisoners generally report good overall health, they report a number of physical and mental health issues, which was also shown to be the case among previous samples of female and male prisoners. ¹⁴ The most commonly reported physical health problems were related to the brain and nervous system, skin, muscles and bones, mouth, and gastrointestinal issues. Mental health and substance use were also frequently reported in female and male prisoners. Changes in the health during incarceration were reported – some negative and others positive. The study highlighted the importance of taking into account how healthy prisoners were prior to incarceration when interpreting overall changes in health. Factors such as weight, nutrition, physical activity, substance use, and the physical environment were shown to influence changes in health. The combination of prior levels of health and the jail environment appear to exacerbate the health problems of prisoners. ¹⁴ More research examining prisoner health prior to and during incarceration, as well as factors that influence changes in health is needed.

A large proportion of prisoners surveyed used health services during incarceration. Reasons for health service visits were largely due for services mandated by the jail, including admission assessments, urine collection, and prescriptions rather than treatment of illness or discomfort. Male and female prisoners found it difficult to access the health services that were available and were generally dissatisfied with the level of care provided at the jail. Barriers to health care identified in this study included a lack of services, feelings of discomfort disclosing health concerns to health professionals, as well as the lack of respect and confidentiality shown towards prisoners by correctional guards and health professionals. We found that the available health services were not adequately meeting the health needs of prisoners. Determining the extent to which prison health services effectively address the needs of prisoners has been noted as a gap in the literature. However, more research is needed.

Sex and gender were shown to influence the health status and use of health services among provincial prisoners. Females reported more heath issues and poorer overall health than male prisoners. They also reported specific health needs related to sexual and reproductive health that need to be addressed. Females used more health services than males and reported more difficulties accessing services than males, yet they were more likely to be satisfied with the health services provided at the jail. This finding was similarly documented in previous research comparing the utilization of health care services among a sample of female and male prisoners in the United States. Acc also played a role in health status and health service utilization. Aboriginal prisoners rated their overall physical and mental health poorer than non-Aboriginals. They also reported a greater need for health services, but used fewer services than non-Aboriginal prisoners. More comparison studies are needed to further explore the similarities and differences of male and female, Aboriginal and non-Aboriginal, prisoners' experiences in health status and health service utilization during incarceration.

Modifications to correctional health services are needed to better meet the needs of provincial prisoners. Improving access to quality care, nutrition, physical activity, and hygienic living conditions in

jail would undoubtedly increase the overall health and wellness of prisoners. We recognize that the correctional setting presents unique challenges in the delivery of health care, such as its focus on security and fewer available resources at the provincial level compared to federal. According to national laws and major international recommendations enforced and reinforced by Canada, prisoners shall have access to the same health services available to other residents regardless of their legal status to protect, promote, and restore physical and mental well-being. However, based on the study's findings, provincial prisoners are not receiving comparable levels of care during incarceration. Therefore, the following recommendations are presented.

Recommendations

It is critical for provincial jails to provide comprehensive health services that meet the health needs of prisoners. In order to achieve this, the following recommendations built on the study's findings, are suggested:

- Recognizing the disparity between prison and community standards of care: it is recommended
 that equivalent health services to those available in the community, including safe and
 confidential, comprehensive services, trained professionals, and prompt service delivery, are
 implemented immediately;
- Recognizing the importance of physician-patient privacy and confidentiality: it is recommended
 that correctional guards refrain from asking prisoners to verbally identify their health concerns
 and not read written detailed health services requests by prisoners, be restricted from health
 services examination rooms unless there is a justifiable security risk, and receive training on
 human rights and prisoner health;
- Recognizing the different sex and gender needs of female and male prisoners: it is
 recommended that women-centred health care for females prisoners be established and
 upheld, especially with respect to reproductive and sexual health, including female health
 professionals and correctional guards, health screening (yearly physicals, pap testing and
 mammograms), birth control, as well as regular examinations, healthy pregnancy information,
 counselling, and nutrition for pregnant females;
- Recognizing the different needs of Aboriginal prisoners: it is recommended that steps be taken to identify culturally-appropriate health services and treatments for Aboriginal prisoners;
- Recognizing the unsanitary conditions of the jail environment and the negative impact it has on prisoners' health: it is recommended that sanitary living spaces, including walls, floors, beds, and clothing to prevent the spread of parasites and skin diseases, are assured;
- Recognizing the importance of nutritious food and safe drinking water in promoting and maintaining good health: it is recommended that a menu meeting Health Canada's Food Guide be implemented immediately and access to clean and safe water be ensured;
- Recognizing the high rates of mental health and substance use among prisoners: it is
 recommended that the availability of mental health and substance abuse services be increased,
 including counselling and methadone treatment for all prisoners who request such services;

- Recognizing the direct relationship between oral health and overall health: it is recommended
 that access to dental care and tools for good oral hygiene be improved, including greater access
 to dental care and the provision of dentist-approved toothbrushes; and
- Recognizing the frequency of headaches prisoners experience and the discomfort headaches cause prisoners: it is recommended that over-the-counter medications, such as acetaminophen and ibuprofen, be made available regularly and as needed.

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