

Improving Health and Healthcare Access for People Who Experience Imprisonment in Ontario

Fiona G. Kouyoumdjian and Aaron M. Orkin

Abstract

People who experience imprisonment have worse health status than other Ontarians – about 40% lack access to primary care in the community, and the period after release from prison is associated with high risks of adverse health outcomes. Population-based correctional and health administrative data suggest that access to quality healthcare in prison and in the community needs to improve if we are to improve population health and deliver on healthcare obligations to people experiencing imprisonment.

Context

On an average day, 38,786 people are detained or incarcerated in prisons¹ across Canada (Malakieh 2019). The number of people who experience imprisonment per year is much larger, but these data are not collected at the national level (Kouyoumdjian and McIsaac 2017). In Ontario provincial prisons alone, there are nearly 7,500 people in custody on an average day (Malakieh 2019), and about 40,000 people are imprisoned annually (Expert Advisory Committee on Health Care Transformation in Corrections 2018).

The state assumes legal responsibilities for people in its prisons. These obligations are enshrined in provincial and federal legislation and internationally in the United Nations' Nelson Mandela Rules. The Mandela Rules state that "prisoners should enjoy the same standards of health-care that are available in the community ... and should have access to necessary health-care services ... without discrimination on the grounds of their legal status" and that prison healthcare services should be organized "in a way that ensures continuity of treatment and care" and be delivered by "qualified personnel acting in full clinical independence" (UN General Assembly 2015).

Disparities in health and access to healthcare between people who experience imprisonment and the rest of the population suggest an imperative to improve care. Data on health and healthcare among people experiencing imprisonment in Ontario are not routinely collected, which precludes routine population health assessment, surveillance and healthcare quality assurance.

We merged population-based correctional and health administrative data to examine health and healthcare utilization among 48,861 people who experienced imprisonment in provincial prisons in Ontario in 2010. In this article, we highlight three of our findings and discuss their implications.

Findings

People who experience imprisonment are less healthy than other Ontarians

Compared to people in the general population, people who experience imprisonment are nine times more likely to have a mood disorder such as depression, 11 times more likely to have a psychotic illness such as schizophrenia, six times more likely to have an anxiety disorder and five times more likely to have a substance-related disorder (Kouyoumdjian et al. 2018b); they are also four times more likely to have HIV and are more likely to have chronic conditions such as diabetes, chronic obstructive pulmonary disease (COPD) and asthma (Kouyoumdjian et al. 2018b). Emergency department utilization data show a high burden of both intentional and unintentional injury in this population (Tuinema et al. 2019). We used a validated system to look at overall morbidity in this population (Johns Hopkins University 2018) and found that people who experience imprisonment had more diagnoses and clusters of conditions than people in the general population (Kouyoumdjian et al. 2018b).

People who experience imprisonment lack access to high-quality care

Universal access to primary care, including family physicians, is a health system priority and instrumental for achieving good health (Starfield 1998; Starfield et al. 2005), particularly for at-risk populations.

We found that 41% of people who were released from provincial prisons in 2010 had not visited a family physician in the two years before they were incarcerated, and 37% did not visit a family physician in the two years after release

(Kouyoumdjian et al. 2019b). People with complex medical and social problems may be particularly likely to benefit from team-based interdisciplinary care models, but a small proportion of people who experience imprisonment have access to Ontario’s Family Health Teams in comparison with the rest of the population: 15% of people in the two years after prison release and 21% of people in the general population (Kouyoumdjian et al. 2019b).

Although we do not have systematic processes in place to assess the quality of care in Ontario provincial prisons, our findings on HIV diagnosis and treatment, cancer screening and antenatal care in people who experienced imprisonment in 2010 indicate that healthcare in prison does not meet patient needs or quality standards (Carter Ramirez et al. 2020; Kouyoumdjian et al. 2018a, 2019a; McConnon et al. 2019; Van Meer et al. 2019).

The period after prison release is risky

In the days and weeks after release from prison, people face elevated risks of adverse health outcomes, including spikes in emergency department use, hospitalization (Kouyoumdjian et al. 2018b; see Figure 1) and death (Kouyoumdjian et al. 2016b). Most emergency department visits in the week after prison release were for high-acuity conditions, with particularly high rates of visits for injuries such as overdose and acute complications of mental illness (Tuinema et al. 2019).

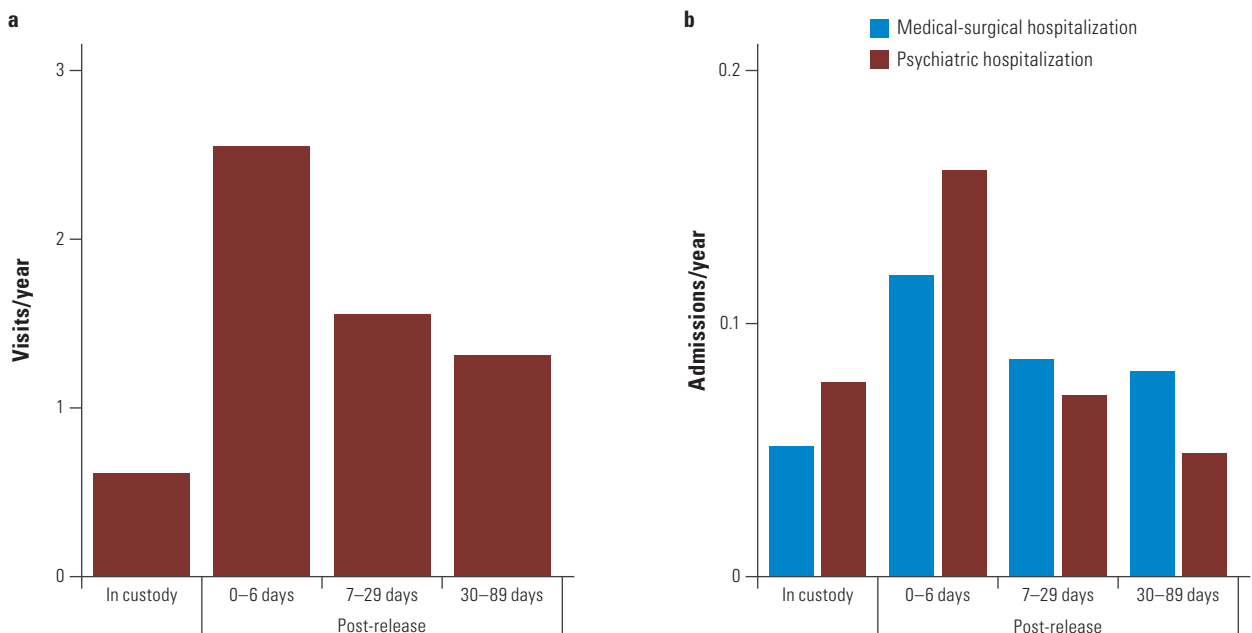
Implications and Recommendations

Our findings are consistent with national and international evidence showing poor health status in people who experience imprisonment (Fazel and Baillargeon 2011; Kouyoumdjian et al. 2016a). Together, these findings suggest a missed opportunity to address medical and social issues, including issues that may lead to incarceration directly, such as the treatment of substance use disorders and mental illness. The disparities identified in our research may be owing to differences in underlying health and social status between people who experience incarceration and those who do not, but Canadian evidence suggests that discrimination on the basis of legal status also plays an important role (Fahmy et al. 2018).

To meet the health needs of this population, healthcare services in prison and on transition out of prison need to be able to serve patients with multiple medical problems, including chronic diseases, mental illness and substance use disorders and injuries. We could build on evidence-based strategies (Freudenberg and Heller 2016; Kouyoumdjian et al. 2015) to meet the Nelson Mandela Rules’ minimum standards for healthcare.

Many of the adverse outcomes at the time of release are preventable, especially with better health and social services in prison. As an example, improved access to treatment for opioid use disorder in prison prevents overdose on release (Degenhardt et al. 2014; Green et al. 2018; Hedrich et al. 2012; Marsden et al. 2017). Other strategies to meet the health needs of people at the time of release include discharge planning and case management (Wang et al. 2008).

FIGURE 1. Rates of (a) emergency department use and (b) hospitalization for people in Ontario while in provincial prisons and after prison release from a retrospective cohort study, N = 48,861



Primary care services in the community need to address stigma, actively accommodate people at the time of release and adapt to the needs of these marginalized patients. We could adapt and implement initiatives from other jurisdictions to link people who experience imprisonment with primary care in the community (Held et al. 2012; Wang et al. 2012), including through the use of supports such as peer navigators and case management.

Transformational change is required to deliver quality care and achieve quality outcomes for this population. In the Moscow Declaration, the World Health Organization (2003) called for “close links or integration between public health services and prison health.” Indeed, integration of health services in correctional facilities with the broader healthcare system may align incentives between the healthcare and correctional systems to improve the health of people experiencing incarceration. Current provincial initiatives include enhancing health system partnerships for provincial prisons, for example, through engagement with Ontario Health Teams, which are a new model of organizing and delivering care (personal communication, Ontario Ministry of the Solicitor General, February 2020). Such integration may also address challenges faced by this population, including at the time of transition from prison to the community; narrow down disparities in health status and healthcare between people who experience imprisonment and others; and facilitate quality improvements (Held et al. 2012).

Conclusions

Profound health and healthcare disparities indicate the need for change to improve health and healthcare for people who experience imprisonment. Nelson Mandela wrote that “no one truly knows a nation until one has been inside its jails. A nation should not be judged by how it treats its highest citizens, but its lowest ones.” The epidemiology of prison populations provides a unique view inside our jails: We do not need to enter prisons to know that we need to provide better prison healthcare. Enhancing healthcare for people who experience imprisonment is important for improving population health and the quality of our correctional system; it is a civil obligation in a free and just society (Kinner and Wang 2014). **HQ**

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NOTE

1. In this article, the term *prison* is used to represent all correctional facilities, including penitentiaries, detention centres and jails.

References

- Carter Ramirez, A., J. Liauw, A. Cavanagh, D. Costescu, L. Holder, H. Lu et al. 2020. *Antenatal Care for Women Who Experience Imprisonment in Ontario, Canada: A Population-Based Retrospective Cohort Study*. Manuscript in preparation.
- Degenhardt, L., S. Larney, J. Kimber, N. Gisev, M. Farrell, T. Dobbins et al. 2014. The Impact of Opioid Substitution Therapy on Mortality Post-Release from Prison: Retrospective Data Linkage Study. *Addiction* 109(8): 1306–17. doi:10.1111/add.12536.
- Expert Advisory Committee on Health Care Transformation in Corrections. 2018. *Transforming Health Care in Our Provincial Prisons: Final Report*. Retrieved February 3, 2020. <<https://johnhoward.on.ca/wp-content/uploads/2019/05/Transforming-Health-Care-in-Our-Provincial-Prisons-External-Advisory-Report-2.pdf>>.
- Fahmy, N., F.G. Kouyoumdjian, J. Berkowitz, S. Fahmy, C.M. Neves, S.W. Hwang et al. 2018. Access to Primary Care for Persons Recently Released from Prison. *Annals of Family Medicine* 16(6): 549–51. doi:10.1370/afm.2314.
- Fazel, S. and J. Baillargeon. 2011. The Health of Prisoners. *The Lancet* 377(9769): 956–65. doi:10.1016/S0140-6736(10)61053-7.
- Freudenberg, N. and D. Heller. 2016. A Review of Opportunities to Improve the Health of People Involved in the Criminal Justice System in the United States. *Annual Review of Public Health* 37: 313–33. doi:10.1146/annurev-publhealth-032315-021420.
- Green, T.C., J. Clarke, L. Brinkley-Rubinstein, B.D.L. Marshall, N. Alexander-Scott, R. Boss et al. 2018. Postincarceration Fatal Overdoses after Implementing Medications for Addiction Treatment in a Statewide Correctional System. *JAMA Psychiatry* 75(4): 405–407. doi:10.1001/jamapsychiatry.2017.4614.
- Hedrich, D., P. Alves, M. Farrell, H. Stover, L. Moller and S. Mayet. 2012. The Effectiveness of Opioid Maintenance Treatment in Prison Settings: A Systematic Review. *Addiction* 107(3): 501–17. doi:10.1111/j.1360-0443.2011.03676.x.
- Held, M.L., C.A. Brown, L.E. Frost, J.S. Hickey and D.S. Buck. 2012. Integrated Primary and Behavioral Health Care in Patient-Centered Medical Homes for Jail Releasees with Mental Illness. *Criminal Justice and Behavior* 39(4): 533–51. doi:10.1177/0093854811433709.
- Johns Hopkins University. 2018. *The Johns Hopkins ACG System: Decades of Impact on Population Health Research and Practice*. Retrieved February 3, 2020. <<https://www.hopkinsacg.org/>>.
- Kinner, S.A. and E.A. Wang. 2014. The Case for Improving the Health of Ex-Prisoners. *American Journal of Public Health* 104(8): 1352–55. doi:10.2105/AJPH.2014.301883.

- Kouyoumdjian, F.G., S.Y. Cheng, K. Fung, A.M. Orkin, K.E. McIsaac, C. Kendall et al. 2018b. The Health Care Utilization of People in Prison and after Prison Release: A Population-Based Cohort Study in Ontario, Canada. *PLoS One* 13(8): e0201592. doi:10.1371/journal.pone.0201592.
- Kouyoumdjian, F.G., L. Kiefer, W. Wobeser, A. Gonzalez and S.W. Hwang. 2016b. Mortality over 12 Years of Follow-Up in People Admitted to Provincial Custody in Ontario: A Retrospective Cohort Study. *CMAJ Open* 4(2): E153–61. doi:10.9778/cmajo.20150098.
- Kouyoumdjian, F., M. Kim, T. Kiran, S. Cheng, K. Fung, A. Orkin et al. 2019b. Attachment to Primary Care and Team-Based Primary Care: Retrospective Cohort Study of People Who Experienced Imprisonment in Ontario. *Canadian Family Physician* 65(10): e433–42.
- Kouyoumdjian, F.G., L. Lamarche, D. McCormack, J. Rowe, L. Kiefer, A. Kroch et al. 2019a. 90-90-90 for Everyone? Access to HIV Care and Treatment for People with HIV Who Experience Imprisonment in Ontario, Canada. *AIDS Care*. [Epub ahead of print]. doi:10.1080/09540121.2019.1679710.
- Kouyoumdjian, F.G., A. McConnon, E.R.S. Herrington, K. Fung, A. Lofters and S.W. Hwang. 2018a. Cervical Cancer Screening Access for Women Who Experience Imprisonment in Ontario, Canada. *JAMA Network Open* 1(8): e185637. doi:10.1001/jamanetworkopen.2018.5637.
- Kouyoumdjian, F.G. and K.E. McIsaac. 2017. Unknown Unknowns: We Need to Know How Many People Experience Imprisonment in Canada. *Open Public Health Journal* 10: 226–31. doi:10.2174/1874944501710010226.
- Kouyoumdjian, F.G., K.E. McIsaac, J. Liauw, S. Green, F. Karachiwalla, W. Siu et al. 2015. A Systematic Review of Randomized Controlled Trials of Interventions to Improve the Health of Persons during Imprisonment and in the Year after Release. *American Journal of Public Health* 105(4): e13–33. doi:10.2105/AJPH.2014.302498.
- Kouyoumdjian, F.G., A. Schuler, F.I. Matheson and S.W. Hwang. 2016a. The Health Status of Prisoners in Canada: Narrative Review. *Canadian Family Physician* 62(3): 215–22.
- Malakieh, J. 2019, May 9. Adult and Youth Correctional Statistics in Canada, 2017/2018. *Juristat* (Catalogue no. 95-002-X). Retrieved February 3, 2020. <<https://www150.statcan.gc.ca/n1/en/pub/95-002-x/2019001/article/00010-eng.pdf>>.
- Marsden, J., G. Stillwell, H. Jones, A. Cooper, B. Eastwood, M. Farrell et al. 2017. Does Exposure to Opioid Substitution Treatment in Prison Reduce the Risk of Death after Release? A National Prospective Observational Study in England. *Addiction* 112(8): 1408–18. doi:10.1111/add.13779.
- McConnon, A., K. Fung, A. Lofters, S.W. Hwang and F.G. Kouyoumdjian. 2019. Colorectal and Breast Cancer Screening Status for People in Ontario Provincial Correctional Facilities. *American Journal of Preventive Medicine* 56(4): 487–93. doi:10.1016/j.amepre.2018.11.011.
- Starfield, B. 1998. *Primary Care: Balancing Health Needs, Services, and Technology (2nd ed.)*. New York, NY: Oxford University Press.
- Starfield, B., L. Shi and J. Macinko. 2005. Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly* 83(3): 457–502. doi:10.1111/j.1468-0009.2005.00409.x.
- Tuinema, J., A.M. Orkin, S.Y. Cheng, K. Fung and F.G. Kouyoumdjian. 2019. Emergency Department Use in People Who Experience Imprisonment in Ontario, Canada. *Canadian Journal of Emergency Medicine*. [Epub ahead of print]. doi:10.1017/cem.2019.401.
- UN General Assembly. 2015. *United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules)*. Retrieved February 4, 2020. <<https://undocs.org/A/RES/70/175>>.
- Van Meer, R., T. Antoniou, D. McCormack, S. Khanna, C. Kendall, L. Kiefer et al. 2019. A Comparison of the Observed and Expected Prevalence of HIV in Persons Released from Ontario Provincial Prisons in 2010. *Canadian Journal of Public Health* 110(5): 675–82. doi:10.17269/s41997-019-00233-0.
- Wang, E.A., C.S. Hong, S. Shavit, R. Sanders, E. Kessell and M.B. Kushel. 2012. Engaging Individuals Recently Released from Prison into Primary Care: A Randomized Trial. *American Journal of Public Health* 102(9): e22–29. doi:10.2105/AJPH.2012.300894.
- Wang, E.A., M.C. White, R. Jamison, J. Goldenson, M. Estes and J.P. Tulskey. 2008. Discharge Planning and Continuity of Health Care: Findings from the San Francisco County Jail. *American Journal of Public Health* 98(12): 2182–84. doi:10.2105/AJPH.2007.119669.
- World Health Organization. 2003, October 23. *Moscow Declaration on Prison Health as Part of Public Health*. Retrieved February 4, 2020. <http://www.euro.who.int/__data/assets/pdf_file/0007/98971/E94242.pdf>.

About the Authors

Fiona G. Kouyoumdjian, MD, MPH, PhD, CCFP, FRCPC, is an assistant professor in the Department of Family Medicine at McMaster University and an adjunct scientist at ICES. She conducts research focused on people who experience imprisonment in Canada and works as a family physician in a provincial correctional facility in Ontario. Fiona can be contacted at kouyouf@mcmaster.ca.

Aaron M. Orkin, MD, MSc, MPH, PhD(c), CCFP(EM), FRCPC, is an assistant professor in the Department of Family and Community Medicine at the University of Toronto. His research focuses on marginalized populations and the integration of clinical medicine and public health. He practises emergency medicine at Humber River Hospital and St. Joseph's Health Centre. He is also the population medicine lead at Inner City Health Associates in Toronto, Ontario.

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