

IDENTIFYING BARRIERS AND ENABLERS TO OPT-OUT HEPATITIS C VIRUS SCREENING IN PROVINCIAL PRISONS IN QUEBEC, CANADA: A QUALITATIVE STUDY WITH PRISON-BASED HEALTHCARE PROFESSIONALS USING THE THEORETICAL DOMAINS FRAMEWORK

Fontaine G^{1,2,3}, Saavedra Ruiz A⁴, Patey AM^{1,5,6}, Grimshaw JM^{1,6,7}, Proulx J^{1,6,8}, Cox J^{4,9,10}, Dussault C⁴ and Kronfli N^{4,9}

¹ Centre for Implementation Research, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Canada, ² Faculty of Medicine, University of Ottawa, Ottawa, Canada, ³ Research Centre, Centre Hospitalier de l'Université de Montréal, Montréal, Canada, ⁴ Centre for Outcomes Research and Evaluation, Research Institute of the McGill University Health Centre, Montréal, Canada, ⁵ School of Rehabilitation Therapy, Queen's University, Kingston, Canada, ⁶ School of Epidemiology and Public Health, University of Ottawa, Ottawa, Canada, ⁷ Department of Medicine, University of Ottawa, Ottawa, Canada, ⁸ School of Psychology, University of Ottawa, Ottawa, Canada, ⁹ Department of Medicine, Division of Infectious Diseases and Chronic Viral Illness Service, McGill University Health Centre, Montréal, Canada, ¹⁰ Department of Epidemiology and Biostatistics, School of Population and Global Health, Faculty of Medicine and Health Sciences, McGill University, Montréal, Canada

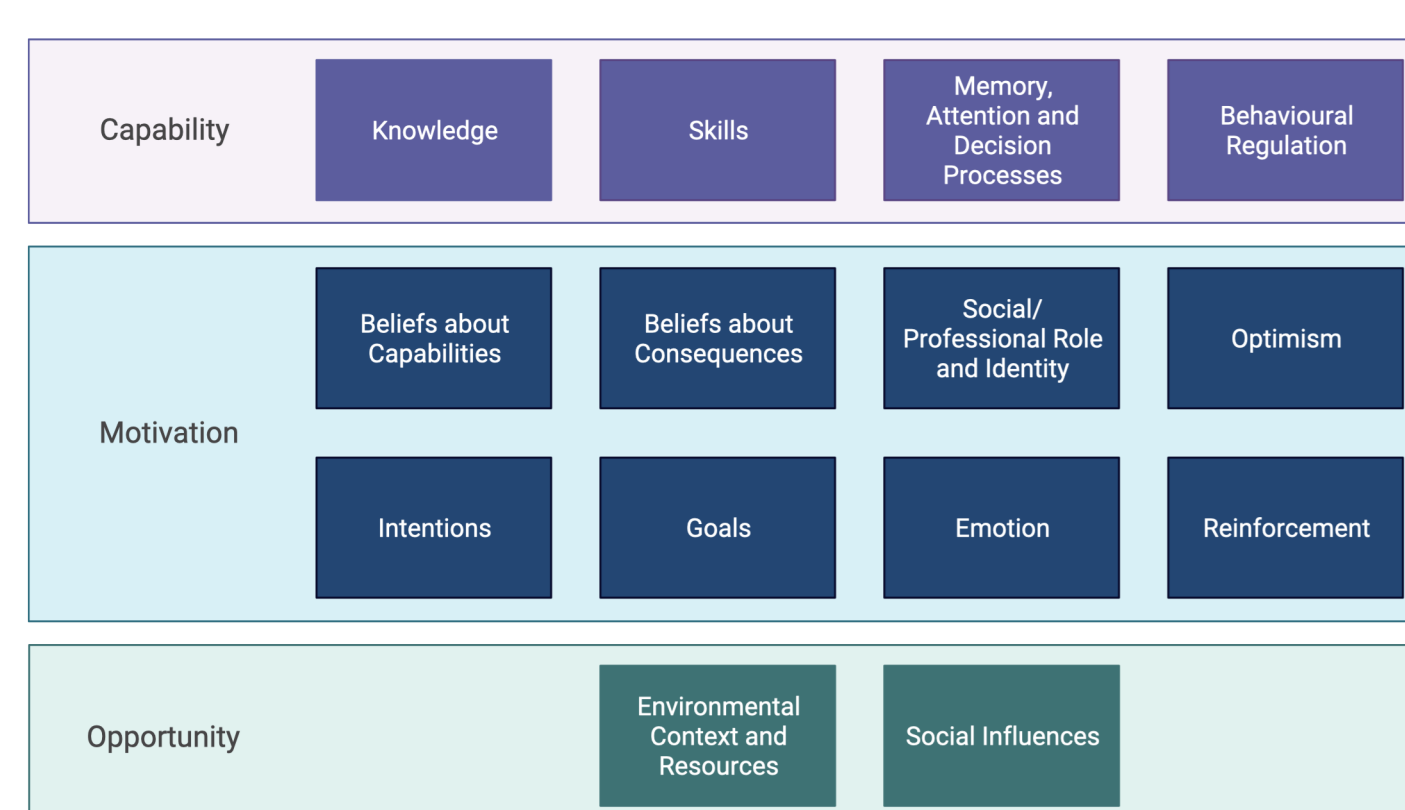
INTRODUCTION

- Microelimination of hepatitis C virus (HCV) in prisons is dependent on systematic HCV screening. Opt-out screening is considered the gold standard screening strategy; people who are incarcerated (PWA) are informed that testing is part of standard of care and is performed unless they decline.
- However, our understanding of the factors influencing the implementation of opt-out HCV screening for PWA in Canadian provincial prisons is limited.
- State-of-the-art implementation science theoretical and methodological approaches can be leveraged to help bridge the evidence-practice gap that exists vis-à-vis HCV screening in provincial prisons.

OBJECTIVE

We sought to identify barriers and enablers of implementing opt-out HCV screening in provincial prisons in Quebec, Canada from the perspective of prison-based healthcare professionals (HCPs).

METHODS



Design and setting: We conducted a qualitative study using the Theoretical Domains Framework (TDF) to identify factors influencing HCPs' likelihood of offering opt-out HCV screening in provincial prisons in Quebec, Canada.

Eligibility criteria: To be eligible, nurses and physicians had to speak French or English, and work in one of four prisons with different HCV screening strategies (i.e., on demand, risk-based, opt-in, opt-out).

Sampling strategy: Participants were recruited using convenience sampling.

Data collection: Semi-structured interviews were conducted using videoconference or telephone (COVID-19 restrictions) and guided by the Theoretical Domains Framework (TDF) (Cane et al., 2012) to examine beliefs and perceptions regarding the target behaviour – i.e., offering opt-out HCV testing in provincial prisons. The TDF identifies 14 theoretical domains that may influence behaviour (see Figure 1). Interviews were audio-recorded, translated to English and transcribed by a professional transcriber.

Data analysis: Directed content analysis identified the TDF domains relevant to opt-out HCV screening, and determined whether a domain has a negative (barrier), neutral or positive (enabler) influence on opt-out HCV screening.

Figure 1. The 14 domains of the Theoretical Domains Framework, representing individual, social-cultural and environmental influences on behaviour.

RESULTS

PARTICIPANT CHARACTERISTICS

- From April 16, 2021, to May 14, 2021, we recruited four physicians and four nurses in the Sexually Transmitted and Blood-Borne Infections (STBBI) screening program across four provincial prisons. Although we did not meet our intended target sample of 10, no new themes were reported in the last three interviews and data saturation was reached. Interviews were ~60 minutes in duration.

BARRIERS AND ENABLERS TO OPT-OUT HCV SCREENING

Beliefs about consequences (mixed = barrier and enabler)

- **Positive beliefs**, e.g., It may result in changes in risky behaviours. "Once the person is treated and aware, well ... there are behaviours that can change or at least be aware of to limit risky behaviour." [RN2]
- **Negative beliefs**, e.g. It could create stigma regarding people who are incarcerated that have hepatitis C. "There is still a stigma in detention, the inmates do not want to say that they are infected, it's a secret those who have hepatitis C and they do not want to say it because there are many false beliefs among inmates as if touching, they will catch it, [...]. So, they wouldn't want to do the test for that reason." [RN4]

Environmental context and resources (barrier)

- HCPs mentioned the **lack of human, financial, and material resources** to support opt-out HCV screening. **Additional STBBI nurses** would likely be needed to support an opt-out HCV screening strategy. "I won't manage with the number of patients to be screened, I won't manage, I won't have enough hours in a day to be able to take care of that." [RN1]
- STBBI nurses reported **competing priorities**, precluding HCV screening.
- In addition, **access to some PWA is restricted** and depends on the availability of correctional guards, who must accompany PWA to the healthcare facility. "It's not always easy to access clients in prison, despite having an office, [...]. Sometimes they are in court, sometimes the area is blocked, or they are all locked up in their cell [...]" [RN4]

Social influences (barrier)

- Participants reported that a **lack of support from upper management**. "Health care managers [in prison] are not health professionals, so they don't necessarily understand the issues that a health professional has or the need, the need to offer a medical clinic..." [RN4]
- The medical team also reported **feeling underappreciated by correctional employees** and collaboration between correctional and STBBI nurses was viewed as sub-optimal. "The guards are not...I think that there's a general culture that really doesn't value the role of the medical team. They don't even understand why there is a need for a doctor or a nurse here." [MD3]

Optimism (mixed) and **Emotions** (mixed)

- Most HCPs felt **optimistic about the idea of implementing opt-out screening**, while being **pessimistic about its feasibility and consequences** (e.g., on workload). A similar situation was observed regarding Emotions, whereby most were **enthusiastic about the idea of opt-out screening**, while **concurrently frustrated** with the low likelihood that it would occur or wary of consequences. "I tell myself that we may never be able to really do massive screening." [RN1] "I could say that I am encouraged, enthusiastic, in the sense that I think it would be a good thing, a good addition." [RN2]

Behavioural regulation (barrier)

- Nurses mentioned that there would need to be **infrastructure changes, such as additional physical and office space, as well as human, material, and financial resources**. "If we want to carry out screening, uh, like that of this type, we would have to create another team that would only do that, only hepatitis C, it would work, but not [STBBI nurses] because we do a multitude of things [...]" [RN1]
- Need for **increased collaboration between the medical teams and awareness**. "It's to raise awareness among all the stakeholders, the nurses, the social worker who works for us, the Centre for Addiction Rehabilitation, I don't know how far he goes for hepatitis C [...] and I think that perhaps there would be some basic information that we can also give to security officers to make them aware. So, if they hear about something, well, maybe they can talk to the inmates about it and then tell them well, go to health services." [MD2]

CONCLUSION

- The barriers and enablers identified indicate HCP interest in implementing opt-out HCV screening in Quebec provincial prisons, but suggest the importance of considering multiple factors (e.g., human, financial, and material resources) before implementation.
- Need for thorough assessment of barriers and enablers to linkage to care and treatment uptake, key steps along the HCV care cascade distal to screening.

ACKNOWLEDGEMENTS

This study was funded by the Canadian Network on Hepatitis C (CanHepC). The funders had no role in the study design, data collection, data analysis, data interpretation, or writing of the manuscript. GF is supported by a Banting Postdoctoral Fellowship (#202010BPF-453986-255367) from the Canadian Institutes of Health Research (CIHR), a Postdoctoral Fellowship Supplement from the University of Ottawa, and a Postdoctoral Fellowship from the CanHepC. NK is supported by a career award from the Fonds de Recherche Québec – Santé (FRQ-S; Junior 1).

CONTACT

Dr. Nadine Kronfli, McGill University
nadine.kronfli@mcgill.ca