

2022

SUBSTANCE USE IN CANADA

Experiences of Harm Reduction Service Providers During Dual Public Health Emergencies in Canada



Canadian Centre
on Substance Use
and Addiction

Evidence. Engagement. Impact.



Experiences of Harm Reduction Service Providers During Dual Public Health Emergencies in Canada

AUTHORS

Sheena Taha, PhD

Interim Director of Knowledge Mobilization

Samantha King, PhD

Research and Policy Analyst, CCSA

Sara Atif, MSc

Research and Policy Analyst, CCSA

WITH A CALL TO ACTION BY

Tony George, MD, FRCPC

Sherry Stewart, PhD, FCAHS, FRSC

Franco Vaccarino, PhD, FCAHS

This document was published by the Canadian Centre on Substance Use and Addiction (CCSA).

Suggested citation: Taha, S., King, S., & Atif, S. (2022). *Experiences of harm reduction service providers during dual public health emergencies in Canada: Substance use in Canada 2022*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.

© Canadian Centre on Substance Use and Addiction, 2022.

CCSA, 75 Albert St., Suite 500
Ottawa, ON K1P 5E7
613-235-4048
info@ccsa.ca

Production of this document has been made possible through a financial contribution from Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

This document can also be downloaded as a PDF at www.ccsa.ca.

Ce document est également disponible en français sous le titre :
Expérience des fournisseurs de services de réduction des méfaits lors de la double urgence de santé publique au Canada : consommation de substances au Canada 2022

ISBN 978-1-77178-980-6

Table of Contents

Acknowledgements	1
Conflict of Interest	1
Forward	2
Forward	4
Substance Use in Canada Series	7
The Series to Now	7
Terminology Notes	9
Executive Summary	11
Introduction	11
Method	12
Key Findings and Interpretation	12
Implications	12
Responses	12
Conclusions	13
Introduction	15
Dual Public Health Emergencies in Canada	15
Harm Reduction Saves and Improves Lives	16
Challenges Providing Harm Reduction Services	16
Challenges Providing Services During COVID	17
Priorities for the Healthcare System in Canada	18
The Current Study	19
Method	21
Integrated Knowledge Mobilization Approach	21
Data Collection	21
Cycle One	21
Cycle Two	21
Measures	21
Professional Quality of Life	21
Mindful Self-Care Scale	22
Adult Attitude to Grief	22
Ethics	22
Participants and Recruitment	22
Data Analysis	23
Results	25
Demographic Characteristics	25
Services and Settings	27
Cycle One	27
Cycle Two	28
Professional Quality of Life: Quantitative Findings	29
Compassion Satisfaction	29
Burnout	30
Secondary Traumatic Stress	30

Professional Quality of Life: Qualitative Findings	31
Work-Related Changes During COVID-19	32
Self-Care: Quantitative Findings	32
Self-Care: Qualitative Findings	33
Self-Care Practice Changed During COVID-19	33
Vulnerability to Grief: Qualitative Findings	34
Vulnerability to Grief: Qualitative Findings	34
Changes in Vulnerability to Grief During COVID-19	35
Stigma: Quantitative Findings	35
Stigma: Qualitative Findings	36
COVID-19 and Work-Related Stigma	37
Resources, Programs and Supports: Qualitative Findings	37
Lack of Supports for Work and Well-Being in the Workplace	38
COVID-19 Related Changes to Resources and Supports	39
Final Comments on Harm Reduction and Work Experiences	39
Discussion	43
Benefits and Challenges of Providing Harm Reduction Services	44
Services and Supports	45
Impacts of the COVID-19 Pandemic and the Overdose Emergency	46
Impact of Gender Identity	47
Impact of Regulatory Status	48
Impact of Lived or Living Experience with Substance Use	48
Limitations	49
Future Research Directions	49
Conclusions	51
A Call to Action: Solutions to Address Drug Toxicity Harms and the Overdose Emergency	53
Theme 1: Access to Services	54
Complexity of the Mental Health and Drug Use Context	54
Access to the Full Range of Effective Medical and Nonmedical Tools to Address the Overdose Emergency	55
Integration of Medical and Nonmedical Interventions to Support the Health and Well-being of Those at Risk of Overdose	55
Technology and System Capacity	56
Theme 2: Stigma	56
Theme 3: Policies and Regulations	56
Funding and Supporting Harm Reduction Service Providers	56
Better Understanding the Issue: The Need for a National Database	57
Conclusions	57
References	58
Appendix A: Survey: The Experiences of Individuals Providing Harm Reduction Services	65
Appendix B: Additional Questions Included in 2021 Survey	74



Acknowledgements

The Canadian Centre on Substance Use and Addiction thanks representatives from the following organizations for providing key input throughout the development, implementation and interpretation of this study. The participation of these partners ensured this document and its findings represent the themes and calls to action most relevant for those providing harm reduction services.

AIDS Bereavement and Resiliency Program of Ontario

Alberta Alliance Who Educates and Advocates Responsibly

Alberta Community Council on HIV

Ally Centre of Cape Breton

ARCHES - Lethbridge

Avenue B Harm Reduction Inc.

Blood Ties Four Directions Centre

Boyle Street Community Services

Centre for Innovation in Peer Support

Harm Reduction Nurses Association

Manitoba Harm Reduction Network

Prairie Harm Reduction

Ontario Harm Reduction Network

Safe Works Access Program, AIDS Committee of Newfoundland and Labrador

Safeworks Harm Reduction Program, Alberta Health Services

Saskatchewan Ministry of Health

University of Montreal

CCSA also acknowledges the review and contributions of CCSA's Scientific Advisory Council, as well as **Dr. Jane Buxton** from the B.C. Centre for Disease Control and Dr. Elaine Hyshka from the University of Alberta for reviewing earlier versions of this report.

Conflict of Interest

Sheena Taha has no conflict of interest to declare.

Samantha King has no conflict of interest to declare.

Sara Atif has no conflict of interest to declare.

Tony George has no conflict of interest to declare.

Sherry Stewart has no conflict of interest to declare.

Franco Vaccarino has no conflict of interest to declare.



Forward

Experiences of Harm Reduction Service Providers During Dual Public Health Emergencies in Canada

Canada is experiencing a record number of tragic and preventable overdose deaths related to the toxic unregulated street drug supply containing fentanyl and its analogues. This public health emergency has been worsened by the COVID-19 pandemic (Special Advisory Committee on the Epidemic of Opioid Overdoses, 2022). The devastating loss of life affects individuals who use substances and their family, friends and communities. Responses to the overdose emergency include ramping up detoxification services and addiction treatment, including opioid agonist therapy. However, not all people who use substances are ready or able to consider treatment or even have abstinence as their goal.

People who use substances have diverse situations and experiences, so they need a range of services to meet their needs. Harm reduction is an essential part of the continuum of care for people who use substances. Harm reduction provides the tools and resources for people who use substances to make informed choices for their survival and well-being. However, despite incontrovertible evidence that harm reduction saves lives, harm reduction may be opposed, often due to ideological beliefs and the criminalization of substance use.

This study initially set out to gain a better understanding of the effect of the overdose emergency from harm reduction service providers' perspective. However, with the onset of COVID-19, CCSA expanded the study to identify the additional effects of dual public health emergencies. Further, the consequences of public health measures introduced in response to COVID-19, including physical distancing, closure of harm reduction sites, limiting the number of clients attending services and transition to virtual from in-person contact, led to fewer face-to-face connections between harm reduction providers and clients. At the same time, the increased toxicity of the illicit market further compounded the overdose emergency to cause devastating increases in overdose deaths (Imtiaz et al. 2021). The effect of the dual public health emergencies on people with lived and living experience of substance use has been explored (Canadian Centre on Substance Use and Addiction 2020; Galarneau et al. 2021). However, there is little published evidence that assesses the effects of the overdose crisis and the COVID-19 pandemic on harm

reduction service providers. Therefore, this study is important to fill that gap and identify potential actions to improve services.

Harm reduction service providers have been at the front line of support for people who use substances throughout the overdose crisis. These committed providers administer compassionate care despite often working in underresourced systems.

Providers have experienced ongoing frustrations as they compare government responses to the overdose crisis with the robust public health response and investments developed for COVID-19. Despite persistent calls for decriminalization and access to safe supply by people with lived and living experience of substance use and harm reduction advocates, including harm reduction service providers, there is perceived to be little progress on these fronts (Watson, 2022).

Harm reduction staff may also experience stigma by association, also known as courtesy stigma. This affects their health as it shapes the work environment and social support they receive from family and friends.

In addition, many direct service providers have lived or living experience of substance use and have close relationships with the people they support. Thus, service providers themselves frequently experience personal grief and loss.

All these interrelated factors significantly affect this group of health professionals.

Participants in this study found meaning in their work and moderate levels of compassion satisfaction, which is similar to studies involving peer overdose responders (Mamdani et al., 2021). However, respondents also showed concerning levels of burnout and secondary traumatic stress due to the continuous exposure to trauma experienced by the people they support. Although the term burnout is sometimes regarded as a result of an individual's inadequate coping skills, it is often due to a lack of available systemic resources and supports (Mescia & Gentry, 2004).

Findings from this study highlight that the overdose crisis has been worsened by COVID-19. From the perspective of harm reduction service providers, a comprehensive healthcare system approach that offers a diversity of services is needed to meet people where they are in their substance use journey. Providers experience



further stress creating greater compassion fatigue and burnout because of the lack of sufficient, accessible and appropriate services to which providers can refer clients in a timely way.

Overdose continues to have devastating consequences across Canada, despite overdose deaths being preventable. Urgent policy changes must consider a variety of responses, including decriminalizing simple possession and providing a safe drug supply (Klaire et al., 2022). Action must be taken to ensure there is sufficient investment in resources across the spectrum of treatment and harm reduction services and supports, as well as in social, financial and housing supports.

For harm reduction services to be accessible and effective, the continued input of the experts (people with lived and living experience with substance use and harm reduction service providers) is essential. There must be adequate pay and supports for service providers to enable them to maintain their own wellness and continue to provide needed services. This report identifies the importance of providing sustainable funding at the local, provincial, territorial and federal levels to improve resources for harm reduction service providers and their clients to prevent these unnecessary deaths.

Jane A. Buxton MBBS, MHSc, FRCPC

Professor, School of Population and Public Health,
University of British Columbia

References

- Canadian Centre on Substance Use and Addiction. (2020). *Impacts of the COVID-19 pandemic on people who use substances: What we heard*. Ottawa, Ont.: Author. <https://www.ccsa.ca/impacts-covid-19-pandemic-people-who-use-substances-what-we-heard>
- Galarneau, L. R., Hilburt, J., O'Neill, Z. R., Buxton, J. A., Scheuermeyer, F. X., Dong, K. ... & Kestler, A. (2021). Experiences of people with opioid use disorder during the COVID-19 pandemic: A qualitative study. *PloS One*, 16(7), Article e0255396. <https://doi.org/10.1371/journal.pone.0255396>
- Imtiaz, S., Nafeh, F., Russell, C., Ali, F., Elton-Marshall, T., & Rehm, J. (2021) The impact of the novel coronavirus disease (COVID-19) pandemic on drug overdose-related deaths in the United States and Canada: a systematic review of observational studies and analysis of public health surveillance data. *Substance Abuse Treatment, Prevention, and Policy*. 16, Article 87. <https://doi.org/10.1186/s13011-021-00423-5>
- Klaire, S., Sutherland, C., Kerr, T., & Kennedy, M. C. (2022). A low-barrier, flexible safe supply program to prevent deaths from overdose. *CMAJ*, 194(19), E674–E676. <https://doi.org/10.1503/cmaj.211515>
- Mamdani, Z., McKenzie, S., Pauly, B., Cameron, F., Conway-Brown, J., Edwards, D. ... & Buxton, J. A. (2021). “Running myself ragged”: Stressors faced by peer workers in overdose response settings. *Harm Reduction Journal*, 18(1), Article 18. <https://doi.org/10.1186/s12954-020-00449-1>
- Mescia, N.D., & Gentry, J.E. (2004). Understanding compassion fatigue: helping public health professionals and other front-line responders combat the occupational stressors and psychological injuries of bioterrorism defense for a strengthened public health response: course manual. Florida Center for Public Health Preparedness.
- Special Advisory Committee on the Epidemic of Opioid Overdoses. (2022, March). Opioid- and Stimulant-Related Harms in Canada. Ottawa, Ont.: Public Health Agency of Canada. <https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants>
- Watson, B. (2022, April 14). B.C. declared overdose deaths a public health emergency 6 years ago. Advocates say the only change is the body count. *CBC News British Columbia*. <https://www.cbc.ca/news/canada/british-columbia/overdose-crisis-anniversary-1.6419792>



Forward

When discussing the main issues of our healthcare system in Canada, especially in these times, access to care and the quality of client care routinely take the spotlight. A well-designed healthcare system can reduce or eliminate contributing stressors, unforeseen challenges and the potential burnout that healthcare workers face. A healthcare system that is strategically nimble enough to meet new and emerging needs of people in Canada will improve results for people using services and the healthcare workers providing them.

The demands of the ongoing COVID-19 pandemic have put an extraordinary amount of strain on healthcare workers in Canada. Healthcare workers in all areas are searching for ways to cope with the ongoing burden and stress. This is now a topic of national importance and dialogue (Brand et al., 2017; Canadian Medical Association, 2018; World Health Organization, 2021). The situation is especially true for the substance use health and mental health workforce, and more specifically for harm reduction service providers.

Harm reduction workers are unique to Canada's healthcare system. They are tasked with the challenge of providing an array of services to meet the various needs of people who use substances (B.C. Centre for Disease Control, 2018; Harm Reduction International, 2021). Those needs are attributed to the varying experiences and journeys of those who use substances.

Experiences of Harm Reduction Service Providers During Dual Public Health Emergencies in Canada closely looks at the challenges harm reduction workers are facing as they continue to deal with the concurrent COVID-19 pandemic and toxic and illegal drug supply crisis. Originally, the concept of this project was to see how healthcare professionals in the system were experiencing devastating grief, loss and stress due to the toxic drug crisis. The emergence of the COVID-19 pandemic made CCSA pause and re-assess. We redirected our focus to the impact of the dual public health emergencies. Moving in this direction was a crucial step. Evidence from this study can be used to fill in the missing gaps in Canada's current knowledge and help find ways to improve services and resources for both harm reduction workers and the people they serve.

The report is timely. Even before the pandemic began, the demands placed on harm reduction workers were stressful. This group of healthcare providers feel unsupported, are under-funded and their well being is affected by the ongoing structural factors that affect their work (Olding, Barker et al. 2021; Olding, Boyd et al., 2021). Given the nature of their work, this shouldn't come as a surprise. Our survey, [The Experiences of Individuals Providing Harm Reduction Services](#), states that although they see immense benefits in their work, harm reduction services providers carry greater levels of burnout and trauma than other healthcare colleagues in hospital and primary healthcare settings (Hunsaker et al., 2015; Ruiz-Fernández et al., 2020). That continues even when compared with healthcare workers during the height of the COVID-19 pandemic (Buselli et al., 2020).

The additional pressure of the COVID-19 pandemic has made the health of harm reduction workers a significant issue, particularly given the devastating number of deaths and the greater investments being made in this area across our country. As part of the broader national dialogue on the health of health professionals, a specific focus is needed on not only the health of the substance use health workforce but also more specifically on the health of harm reduction service providers. The burnout that harm reduction workers are experiencing is unrelenting as we continue to navigate through the dual public health emergencies. The secondary trauma stressors they now deal with are even more pronounced. As we continue to invest in and expand harm reduction services, Canada has the opportunity right from the start to build in the needed supports and investments as noted in this report.

Many of the secondary stressors contributing to this burnout were also highlighted in the recent joint study by the Canadian Health Workforce Network and the Mental Health Commission of Canada. [COVID-19 Impacts on the Mental Health and Substance Use Health \(MHSUH\) Workforce in Canada](#) found that opioid toxicity deaths increased by 88% during the pandemic. The study also states the availability or ability of the MHSUH workforce to provide services since the start of the pandemic decreased by 43%. Lockdown and physical distancing measures, and people's lack of access to, or comfort with, virtual care were the main contributors of this. These and other substance use health and mental health issues (see [Call to Action](#)) continue to compound the stress on those who provide harm reduction services.



So, as we address the needs in our healthcare system based on what we have experienced since the start of the COVID-19 pandemic and address the mental well being of healthcare professionals, we must focus on the growing needs for substance use health and mental health in the general population. We must consider the measures needed to retain and strengthen the MHSUH workforce. And we must ensure harm reduction workers are part of the discussion. In so doing, we can improve the health outcomes of people using these services and those providing them.

The October 2021 creation of the new Ministry of Mental Health and Addictions is recognition from the federal government of the need to focus more significantly on MHSUH issues as part of the broader healthcare system. Canada has the opportunity to do that.

The Call to Action in this report outlines the desperately needed actions and additional investments needed to combat drug toxicity harms and the overdose emergency. As Canada provides greater investments in this area, it is possible to address the factors influencing the health of harm reduction service providers to ease their burdens, increase retention and reduce burnout within this workforce. The Call to Action also highlights ideas for revamping how Canada integrates and funds harm reduction in our healthcare system more broadly.

Since the COVID-19 pandemic began more than two years ago, Canada has witnessed an increase in MHSUH concerns in the general population. Therefore, maintaining and improving the overall well being of the MHSUH workforce in Canada that is called on to respond to those growing concerns is an investment that would positively impact every area of our healthcare system. This is an investment in our healthcare system we cannot afford **not** to make.

“

ACKNOWLEDGEMENTS

I thank all the harm reduction service providers and clinical experts who took time from their challenging schedules to provide their thoughts and expertise, which formed the basis for this report. Special thanks also to Dr. Amy Porath for her expert advice and guidance throughout this process; Dr. Tony George, Dr. Sherry Stewart and Dr. Franco Vaccarino for writing the Call to Action; and Dr. Jane Buxton for writing the external foreword.

”

Rita Notarandrea, MHSc, CHE, ICD.D

Chief Executive Officer,
Canadian Centre on Substance Use and Addiction







Substance Use in Canada Series

Since 2005, Substance Use in Canada (formerly Substance Abuse in Canada) has shone a spotlight on key substance use issues and identified specific areas for action in policy and practice. Each report in the series is intended for a broad audience that includes policy makers, program development personnel, researchers, educators and health professionals. Health journalists are also an important audience as they can help raise the public profile of issues discussed and help create the motivation for change.

While the previous seven reports in the series have reviewed the literature to provide a broad overview of an important substance use topic, this eighth Substance Use in Canada report focuses on survey results highlighting the experiences of individuals providing harm reduction services during the overdose emergency, both before and during the COVID-19 pandemic. Given the gravity of the situation in Canada, this report aims to contribute to the evidence base by quantifying the magnitude of positive and negative aspects of harm reduction provision. The Call to Action provides concrete measures various players can take to improve the care system and structure, ultimately leading to improvements in the lives of those affected by and responding to drug harms.

The Series to Now

- ❖ **Substance Abuse in Canada: Current Challenges and Choices** examined various topics, including the prevention of alcohol problems, alternative sanctions for cannabis use and possession, drug-impaired driving, and the nonmedical use and diversion of prescription medication.
- ❖ **Substance Abuse in Canada: Focus on Youth** looked at the prevalence of substance use and its associated harms among young people, exploring the underlying neurobiology of substance use in adolescence and identifying gaps in youth-centric services.
- ❖ **Substance Abuse in Canada: Concurrent Disorders** focused on the co-occurrence of mental health and substance use problems, examining the interconnections between addiction and mental illness, the costs of concurrent disorders for the healthcare system, and why treating these complex cases requires new and innovative approaches.
- ❖ **Licit and Illicit Drug Use during Pregnancy: Maternal, Neonatal and Early Childhood Consequences** addressed the medical and obstetrical consequences of problematic drug use and dependency in pregnant women, as well as the short- and long-term effects that prenatal exposure to drugs can have on a child's development.
- ❖ **Childhood and Adolescent Pathways to Substance Use Disorders** explored influences during childhood and adolescence that can affect problematic substance use later in life, as well as how understanding those influences has implications for prevention and treatment.
- ❖ **The Effects of Cannabis Use during Adolescence** reviewed the effects of youth cannabis use, looking specifically at the drug's impact on health and brain development, as well as the interventions currently available for treating cannabis use disorder.
- ❖ **Improving Quality of Life: Substance Use and Aging** outlined the unique considerations for substance use and harms among the aging population in Canada and highlights the effectiveness of various interventions.





Terminology Notes

Several terms used in this report have clinical definitions, which are provided below. The Canadian Centre on Substance Use and Addiction (CCSA) no longer uses the term “substance abuse,” as it is stigmatizing. However, some of the sources cited in the report may use “substance abuse” and variations of it as clinical indicators and outcomes. If the sources for this report use these terms, they are included in quotation marks to indicate they come from another source. These terms are left intact to preserve the integrity of the original research being cited.

Harm reduction: For this study, we defined harm reduction broadly as any means to reduce the negative consequences associated with drug use. This could be represented by any health or social services, supports provided throughout the continuum of care, or any combination of these. Some examples provided to study participants included needle or syringe distribution programs, naloxone distribution, counselling, safer-use education, HIV or hepatitis C testing, and drug testing.

Lived or living experience with substances: This phrase refers to the past or current use of substances, respectively. For the sake of brevity “lived experience” is sometimes used to refer to either past or current substance use.

Opioids: Opioids are substances that can relieve pain and produce feelings of euphoria, as well as reduce respiration and potentially cause death. There are legal, prescription forms of opioids, as well as illegal forms that are not regulated and can contain contaminants that increase the risk of harm (Health Canada, 2019b).

Overdose emergency: This term is used to refer to the fatal and nonfatal harms occurring among those using substances that may be toxic. This term also refers to the immense and mounting illicit drug toxicity deaths occurring from opioids, opioid analogues and other substances (B.C. Centre for Disease Control, 2021).

Substance use: Substance includes all legal and illegal drugs or psychoactive substances, including alcohol and tobacco.

Substance use disorder: This medical condition is a cluster of cognitive, behavioural and physiological symptoms related to the use of a psychoactive substance and experienced by an individual who continues to use the substance despite the development of problems. Problems can include harm to the individual's physical or mental health; harm to the welfare of others; adverse social consequences, such as failure to meet work, family or school obligations; interpersonal conflicts; or legal problems (American Psychiatric Association, 2013). Some individuals feel the term “disorder” is stigmatizing. It is included in this report as it relates to clinical guidelines and treatment planning. It is not intended as a label to be placed on an individual.





Executive Summary

Introduction

Harm reduction is a critical piece of the continuum of care for those experiencing harms related to substance use. This report is intended for ministers of health, chief public health officers, individuals working in health policy and system planning, and decision makers from municipal to federal levels. It provides them with an understanding of how the overdose emergency combined with the COVID-19 pandemic is affecting those providing response services. This report is also intended for employers, leaders, benefit and employee assistance providers, and governments. For them, this report highlights the actions that need to be taken to ensure appropriate resources are available to support the well-being of harm reduction providers.

Over the last 20 years, drug-related harms — particularly those associated with opioids and opioid analogues — have become increasingly prominent, leading to a national public health overdose emergency. It has only recently been recognized that comprehensive and compassionate responses are needed, so the continuum of care can respond to the harms an individual using substances may be experiencing. With fentanyl appearing in 55% of toxicity deaths in Canada in 2019, 80% in 2020 and 87% in 2021, harm reduction has become a critical response to the increasingly toxic drug supply.

The evidence related to the effectiveness of harm reduction services has been well established, yet many harm reduction services are provided by unregulated workers, volunteers or both to fill gaps in healthcare services. These individuals often have their own lived or living experience with substance use. They report many benefits of their jobs, including purpose and meaning in their daily work and being valued for their expertise. However, they also report challenges to their roles, including discrimination, job instability and a lack of benefits or compensation.

Many harm reduction services are under resourced and unsupported. Providers are encountering chronic, daily stress from structural factors that create a precarious and inequitable working environment. Furthermore, the nature of harm reduction work can be emotionally taxing with constant exposure to trauma and death. These factors result in harm reduction providers carrying out their daily work while burdened with grief and fear of further loss among their friends, family and community.

A potential outcome of repeatedly witnessing these harms is the development of burnout, compassion fatigue and secondary traumatic stress.

In March 2020, the World Health Organization declared COVID-19 a global pandemic. Individuals who use substances are at increased risk of harms from COVID-19 because they have a greater likelihood of underlying health conditions and of living in settings where social distancing and isolation are not possible. They are also at increased risk for substance-related harms, such as experiencing a toxicity event while using a substance alone, withdrawal occurring while isolated and using a potentially more toxic drug supply as restricted travel and closed borders make illegal substances more difficult to obtain.

The many challenges to providing harm reduction services were worsened by the COVID-19 pandemic. Many programs had to stop or reduce service provision when governments initiated COVID restrictions, including lockdowns. Additionally, both people who use drugs and care providers said physical distancing and virtual-only contact were barriers to treatment services as these changes dehumanized social connections and lessened opportunities to build trust. And yet, clients reported that the continuation of harm reduction services were lifelines, providing safety and stability during major interruptions in other services.

The initial objective of this study was to gain an in-depth understanding of how the overdose emergency was affecting the individuals providing harm reduction services in Canada from their perspective as frontline providers who had not yet been considered on a national scale (Cycle One). With the emergence of the COVID-19 pandemic, we expanded the objectives to determine how the pandemic was affecting them, as well as the ongoing impact of the overdose emergency (Cycle Two). Both cycles sought to quantify levels of their grief, trauma and burnout, and understand the self-care they were using. A final focus sought to understand how these experiences may differ across gender identities, between regulated professions (one that requires certification, registration, licensing or is overseen by a regulatory body) and unregulated professions, and in those who have lived or living experience with substance use.



Method

Representatives of jurisdictional and community harm reduction services participated in multiple consultations to validate the need for this study, help identify key themes, refine research questions, help interpret the results, identify implications and suggest actions to be implemented.

Surveys used standardized measures of professional quality of life, self-care and grief. Open-ended questions were used to address experiences of stigma as well as resources and supports that were available or that could be beneficial if implemented. Cycle One data were collected between July 30 and Sept. 30, 2019. Cycle Two was conducted from Jan. 27 to March 8, 2021.

Key Findings and Interpretation

In total, 651 valid surveys were completed in 2019, and 1,360 were completed in 2021. Respondents consistently reported moderately high levels of compassion satisfaction. Our qualitative results indicated that respondents found great meaning in the work they do, which may buffer against some of the job's stressors.

The mean levels of burnout and secondary traumatic stress observed in both survey cycles were high. They were greater than benchmarks among professional caregivers for survivors of trauma and among nurses working in multiple settings. Even when examining the experiences of hospital healthcare workers during COVID, burnout and secondary traumatic stress were markedly higher in our study. These findings indicate that those working in harm reduction are experiencing a pronounced strain on their emotional well-being. Vulnerability to grief reported in our study approached levels previously observed among bereaved individuals. Partners in our consultations indicated burnout had become normalized in their profession, and those working in this field are saturated with grief. Partners shared that if they were to stop and try to process the grief, it would be overwhelming, so they numb out and keep going. Levels of secondary traumatic stress and vulnerability to grief increased in Cycle Two, which may reflect the emotional connection providers have to their clients. Indeed, qualitative responses indicated that respondents had become more sensitive to the well-being of their clients during the pandemic.

Experiences of stigma in Cycle Two were significantly less than those experienced in Cycle One. It is possible that the physical distancing and stay-at-home orders exacted by public safety protocols may have reduced the interactions respondents were having with others,

providing fewer opportunities for stigma to occur. It is also possible that the reduction of stigmatizing experiences observed in 2021 was in part the result of anti-stigma advocacy and education to improve people's understanding of substance use.

Yet, partners in our consultations were surprised by our quantitative findings that experiences of stigma were lower as they felt it was still pervasive in their communities — a theme that is strongly represented in our qualitative findings. Partners suggested that stigma may be becoming more subtle and thus more difficult to discern. When supporting individuals who use drugs to access health care, partners observed changes in the way healthcare staff responded to the patient once they learned of the client's substance use. While not overt, partners said healthcare providers may change their tone of voice, or that the interaction changes from one of a discussion to being more direct. The suggested interpretation is that healthcare providers are learning to be more restrained in their interactions with people who use substances and those providing harm reduction services, but that the stigma persists under the veil of political correctness.

Gender differences, regulatory status and lived or living experience with substance use had an impact on outcome variables. They are discussed in detail in the report.

Implications

Governments and national agencies have identified access to timely care, combatting stigma within the health system, well-integrated and coordinated approaches to mental health and substance use treatment, and healthcare provider well-being as priorities requiring significant action. The immense toll COVID 19 placed on healthcare and service providers cannot be underestimated. For harm reduction providers, these impacts are compounded by the ongoing and escalating overdose emergency, making the service gaps experienced by them and their clients all the more critical to address.

Responses

A failure to support the essential workforce translates to increased harms among the individuals they serve, and can ultimately cascade to take a toll on the healthcare system. Thus, effectively responding to mental health needs may lead to improved outcomes not only for an individual or their clients but for system capacity and healthcare costs as well.



Strategies to address stress and burnout, and to promote well-being among healthcare providers have shown promise. But to benefit from such interventions, harm reduction workers need access to these supports. Our study's results revealed that even when supports are available, they are often not adequate, either because an insufficient number of sessions are covered through benefits or because services in employee assistance programs do not have the trauma and grief lenses necessary to respond to the complexities of harm reduction workers' experiences.

Our consultation partners said their organizations had been using strategies such as on-site counselling, debriefing and alternate staffing models to help workers cope with the challenges of responding to overdose events. They are seeing some initial success in keeping workers in their roles. Recommendations have been developed for workplaces in Canada to support mental health, including creating a comprehensive, organization-wide mental health strategy, establishing mandatory mental health training for leaders, developing tailored mental health supports, prioritizing a supportive return-to-work process, and assessing outcomes and committing to continual improvement.

Our qualitative findings highlight that the healthcare system itself is a barrier to providing quality care. Survey respondents reported that their professional quality of life was affected more by the failures of current policies and systems than it was by components of their jobs. These findings speak to the need for system-wide change to better support those who use substances and harm reduction workers. These changes can be implemented at the individual level by ensuring wage parity and remuneration for equal work and at a societal level by addressing long-standing stigma toward substance use. Addressing the issue from multiple angles will better support the well-being of the essential frontline harm reduction providers.

Government-implemented solutions may include provincial and territorial governments providing funding and capacity for evidence-informed psychotherapy, using legislation to ensure workplace mental health, using regulations to influence health and disability insurance providers to ensure workplace mental health, and providing motivators such as tax incentives or subsidies for those who implement quality mental health tactics. Implementing strategies that address the key components outlined above will address the gaps in access to care, healthcare provider well-being and integration of care that have been highlighted as priorities nationally and internationally. Further, this will ensure a healthy and capable workforce to support the post-pandemic recovery of people living in Canada.

Conclusions

Our study's findings and our consultations point to five important considerations to improve the experiences of those providing harm reduction services.

1. A comprehensive healthcare system that integrates harm reduction services, closely linking them to physical, psychological and social support services, will increase access and better meet the needs of those using substances and those providing harm reduction services.
2. Sustainable and reliable federal, provincial and territorial funding for harm reduction will allow for a continuity of services and will remove financial and planning stressors for program directors and staff.
3. Benefit providers ensuring counselling resources are gender-, trauma- and grief-informed will prevent further harm and ensure that the investment in these resources will have meaningful outcomes. Employers providing a sufficient number of sessions and financial compensation will ensure that a benefit is received and sustained.
4. Continued examination and evaluation of equitable staffing models and policies, as well as addressing structural vulnerabilities to burnout, such as job precarity and economic insecurity will inform efforts to improve well-being.
5. Bolstering anti-stigma initiatives among the public and with providers in the broader healthcare system to combat overt and subtle stigma will increase willingness to seek and offer help, respectively, facilitating positive outcomes.

Support for the essential workforce is critical to ensuring the well-being of the individuals they serve, as well as the health of the broader healthcare system. It is imperative to address the challenges outlined by survey respondents as post-pandemic recovery will require a full complement of services and supports to respond to mental health and substance use concerns. None of the above initiatives should be undertaken without the meaningful engagement of people who use drugs and those providing harm reduction services to support the principles of "nothing about us without us."





Introduction

Dual Public Health Emergencies in Canada

Over the last 20 years, drug-related harms — particularly those related to opioids and opioid analogues — have increased markedly, leading to a national public health overdose emergency (Health Canada, 2019b). Initially understood as reflecting prescription drug harms (National Advisory Committee on Prescription Drug Misuse, 2013), multiple factors have contributed to this complex public health emergency. These factors range from social and structural determinants of health, the competency of care providers, misinformation and advertising from pharmaceutical companies, rampant increases of fentanyl in the illegal drug supply, and stigma (Taha et al., 2019).

Between January 2016 and March 2021, 22,828 people died because of opioid toxicity and 37,843 people were hospitalized for opioid- and stimulant-related poisoning (Special Advisory Committee on the Epidemic of Opioid Overdoses, 2021). While staggering, these numbers do not capture the full range of individuals, families, friends and communities that are grieving, and continuing to be impacted by substance-related harms.

The complexity and pervasiveness of the overdose emergency have prompted communities and all levels of government to implement responses that can help in the short term (e.g., increased availability of naloxone to reverse opioid toxicity events; Moustaqim-Barrette, 2019) and in the long term (e.g., medical school curriculum development in pain management and substance use management; Association of Faculties of Medicine of Canada, 2018). It has only recently been recognized that responses that are both comprehensive and compassionate are necessary so the entire continuum of care is able to reduce the harms an individual may be experiencing (Health Canada, 2019c). Though much remains to be done, the COVID-19 pandemic interrupted many of these responses, exacerbating harms for those who use substances (Health Canada, 2021a).

The World Health Organization declared COVID-19 a global pandemic in March 2020 (2020, Mar. 11). Many jurisdictions enacted stay-at-home orders to minimize in-person contacts. While grocery stores and pharmacies remained open with limited capacity, schools and nonessential workplaces either closed completely or moved online to function virtually. Individuals who use substances were at increased risk of harms from COVID-19 if they lived in group settings where physical distancing, isolation and quarantine were not possible (Canadian Centre on Substance Use and Addiction, 2020a; Public Health Agency of Canada, 2020; Roxburgh et al., 2021). They were also at increased risk because many had underlying health conditions, such as pulmonary or respiratory problems (Harm Reduction International, 2020; Public Health Agency of Canada, 2020; Roxburgh et al., 2021).

These COVID-related risks were then compounded by an increased risk of substance- and mental health-related harms, such as:

- Experiencing a toxicity event while using substances alone (Roxburgh et al., 2021);
- Interruptions to treatment and harm reduction services (Canadian Centre on Substance Use and Addiction, 2020a; Frost et al., 2021; Health Canada, 2021a; Russell et al., 2021; Shreffler, et al., 2021);
- Withdrawal occurring while isolated (Health Canada, 2021a);
- Increased likelihood of recurrence of use (Shreffler et al., 2021); and
- A potentially more toxic drug supply as restricted travel and closed borders made illegal substances more difficult to obtain (Ahamad et al., 2020; Canadian Centre on Substance Use and Addiction, 2020a).



Indeed, 60% of respondents to a Public Health Agency of Canada survey who use drugs and live in Canada reported that their mental health status had worsened since the start of the pandemic. Large proportions of the respondents indicated that their substance use had increased (Public Health Agency of Canada, 2021). Moreover, the number of illicit drug toxicity deaths in British Columbia, Alberta and Ontario increased following a COVID-19 State of Emergency declaration issued in March 2020 (B.C. Centre for Disease Control, 2021; Gomes et al., 2021; Statistics Canada, 2021). Similar trends were observed in the United States, where rates of opioid-related toxicity incidents significantly increased following a stay-at-home order issued in Pennsylvania in April 2020 (King et al., 2021). In October 2021, when Canada was in the fourth wave of the COVID-19 pandemic, preliminary data from Ontario from the early months of 2021 showed that rates of opioid-related deaths were again increasing, 60% more than 2020 rates for the same period and 71% more than those observed in 2019 (Friesen et al., 2021).

Harm Reduction Saves and Improves Lives

People who use drugs have reported that as long as drug use is criminalized, stigma will continue (Health Canada, 2019b), and access to services and supports will be impeded (Kolla & Strike, 2019; Kolla & Strike, 2021). Furthermore, the criminal repercussions of drug use can increase harms by causing individuals to use substances alone, away from support services (Canada, 2019b). Individuals who use drugs and also provide harm reduction services have reported feeling threatened by the community, police and child protection workers (Dechman, 2015). Indeed, while individuals living in two large Canadian cities recognized some potential benefit of certain harm reduction strategies, they were hesitant to have them implemented in their communities (Kolla et al., 2017).

Individuals experiencing harms from substance use need a range of comprehensive services. These span a continuum of care that responds to those who wish to continue to use substances, as well as those who wish to stop or minimize their use (Alberta Health Services, 2019; Harm Reduction International, 2021). Harm reduction services aim to lessen the risks of using drugs, meet individuals at whatever stage of substance use they may be at and provide resources to support individuals and communities (B.C. Centre for Disease Control, 2018). This includes services such as needle programs, opioid

toxicity interventions, providing injections to others, drug testing, wound care, opioid agonist therapy and counselling (Dechman, 2015; McCall et al., 2019).

With fentanyl appearing in 55% of toxicity deaths in Canada in 2019, 80% in 2020, and 87% in 2021 (Special Advisory Committee on the Epidemic of Opioid Overdoses, 2021), harm reduction has become a critical response to the toxic drug supply. As of October 2021, 37 supervised consumption sites were offering services across Canada (Health Canada, 2021b). There were also five non-supervised consumption sites, which offered drug checking to help individuals make informed decisions about their substance use (Health Canada, 2021b).

The evidence related to the effectiveness of harm reduction services has been well established. For example, supervised consumption sites have been shown to prevent opioid toxicity events, provide access to sterile needles and other drug use equipment, and connect individuals to support services (Expert Advisory Committee on Supervised Injection Site Research, 2008; Kerr et al., 2017). In British Columbia alone, during a 21-month period, an estimated 1,580 deaths were avoided by take-home naloxone, 230 by overdose prevention services and 590 by opioid agonist therapy (Irvine et al., 2019). Since opening in 2017, supervised consumption sites in Alberta have had a 100% success rate for reversing opioid toxicity events. They have made 35,000 referrals to health and social services, with 10,000 of those being to addiction treatment services (Alberta Community Council on HIV, 2019). Across Canada, more than 61,000 naloxone kits have been used to reverse toxicity events (Moustaqim-Barrette et al., 2019). Furthermore, individuals receiving medically prescribed heroin have experienced positive outcomes, such as reconnecting with family members, obtaining jobs, securing housing and food, and returning to school (McCall et al., 2019).

Challenges Providing Harm Reduction Services

While some harm reduction services are provided by regulated practitioners (e.g., physicians, nurse practitioners and pharmacists prescribe opioid agonist therapy; Health Canada, 2018), many frontline services are provided by unregulated workers, volunteers or both to fill gaps. These individuals often have their own lived or living experience with substance use (Olding, Barker et al., 2021).



Individuals from Nova Scotia who inject drugs reported feeling that healthcare practitioners no longer considered them legitimate patients once the providers become aware of their drug use (Dechman, 2015). However, when people with lived experience had to step in to fill healthcare gaps and respond to toxicity events, it enhanced programs as individuals using the services were comforted by providers who had drug-related expertise and similar life experiences. Their presence can foster a safe, inclusive environment (Kennedy et al., 2019).

Individuals with lived experience who provide harm reduction services report many benefits from their jobs, including purpose and meaning in their daily work (Greer et al., 2021; Pauly et al., 2021), being valued by peers for expertise and inspiration (Pauly et al., 2021; People with Lived Experience of Drug Use National Working Group et al., 2021), preventing deaths and countering stigma (People with Lived Experience of Drug Use National Working Group et al., 2021) and having a sense of belonging (Pauly et al., 2021). Yet, these individuals also report tokenism, discrimination and job insecurity, and a lack of benefits, compensation and organizational recognition of their work as challenges of the role (Greer, Bungay et al., 2020; Greer, Buxton et al., 2021; Mamdani et al., 2021; Olding, Barker et al., 2021; Olding, Boyd et al., 2021b; People with Lived Experience of Drug Use National Working Group et al., 2021). Moreover, a study of people working in homeless services, supportive housing services or harm reduction services surveyed during COVID-19 revealed that 18% of respondents did not have paid sick days or private health insurance, and 27.6% experienced moderate or extreme financial problems due to the pandemic (Mental Health Commission of Canada, 2021).

This discussion highlights how much harm reduction work is under resourced and unsupported, increasing the emotional toll on those who step into these roles (Health Canada, 2019a; Jozaghi, 2018). Individuals providing these services are encountering chronic, daily stress from structural factors that create a precarious and inequitable working environment (Olding, Barker et al. 2021, Olding, Boyd et al., 2021). These factors include,

- A lack of resources to fund and support their work environments, including a lack of services to which they could refer their clients (Bigras et al., 2021; Health Canada, 2019a; Kennedy et al., 2019; Mamdani et al., 2021);
- Instability in long-term vision for their work (e.g., short-term approvals for overdose prevention sites and ongoing reviews of supervised consumption site effectiveness) (Government of Alberta, 2019; Canadian Press, 2018);

- A lack of recognition of the expertise that individuals with lived or living experience have and the importance of their integration into the healthcare system (Dechman, 2015; Health Canada, 2019a; Greer et al., 2020); and
- Stigma toward substance use in general and harm reduction services specifically (Dechman, 2015; Health Canada, 2019a; McCall, 2019).

The nature of harm reduction work, particularly for those in emergency response settings, is emotionally taxing, with constant exposure to trauma and death (Kolla & Strike, 2019; Mamdani et al., 2021; Olding, Barker et al., 2021). In addition, individuals providing harm reduction services may have lived experiences and often have personal ties with those who have died from drug toxicity. These connections result in harm reduction providers living their daily lives while burdened with grief and fear of further loss among their friends, family and community (Health Canada, 2019a; Kennedy et al., 2019; Khorasheh et al., 2021; Mamdani et al., 2021; Mental Health Commission of Canada, 2021). Repeatedly witnessing harms, distress and loss of life can lead to the development of burnout, compassion fatigue, vicarious trauma or secondary traumatic stress (Bigras et al., 2021; Centre for Addiction and Mental Health, n.d.; Dechman, 2015; Kennedy et al., 2019; Olding, Barker et al., 2021; Shepard, 2013). While the definitions and distinctions among these terms can vary, the toll taken on people providing support can be physical, mental or both (Centre for Addiction and Mental Health, n.d.; EQUIP Health Care, 2019; Kanno & Giddings, 2017).

Challenges Providing Services During COVID

Challenges providing harm reduction services were exacerbated by the COVID-19 pandemic. Many programs had to stop or reduce services when the pandemic was first declared (Frost et al., 2021; Harm Reduction International, 2021; Noyes et al., 2021; Radfar et al., 2021). A national sample of people who use drugs in Canada reported disruptions to services for harm reduction, opioid agonist treatment, counselling, shelter and housing, and withdrawal management, as well as disrupted access to medical professionals, pharmacies and food banks during COVID-19 (Public Health Agency of Canada, 2021; Russell et al., 2021).

Syringe service programs in the United States varied in the amount of time these services were required to shut down based on whether state governments considered them an essential service (Frost et al., 2021). Some of these services reported longer closures while having to request and justify their designation as an essential service and communities created barriers to them using outdoor or other spaces to adapt services (Heimer et al., 2020). Both of these measures had negative effects on the health and safety of their clients (Frost et al., 2021). One clinic in Boston estimated that a three-month closure resulted in 363 missed contacts, as well as 169 naloxone kits and 402 syringes not being delivered (Noyes et al., 2021). Services that were open were affected by reduced staff and volunteers because of concerns about contracting the virus, resource cuts or staff being reassigned to other departments to help with the COVID-19 response (Frost et al., 2021; Noyes et al., 2021).

Additionally, people who use drugs and those providing harm reduction services both cited physical distancing and virtual-only contact as barriers to treatment services as they dehumanized social connections and lessened opportunities to build trust, both of which are integral to the success of harm reduction (Frost et al., 2021; Noyes et al., 2021; Roxburgh et al., 2021). Restrictions on physical contact also prevented assisted injection services, presenting an additional barrier to individuals needing help (Russell et al., 2021). And yet, clients reported that the continued harm reduction services were lifelines, providing safety and stability during major interruptions in other services (Parkes et al., 2021). The barriers put in place to reduce the transmission of COVID-19 also presented some opportunities to improve service provision. Examples include increased quantities of take-home agonist supplies, secondary syringe distribution and mobile services (Frost et al., 2021).

The well-being of frontline healthcare providers declined during previous world-wide pandemics with adverse psychological effects, such as stress and anxiety most often observed (Magill et al., 2020). 64% of physicians reported occupational stress (which leads to emotional exhaustion) during COVID, as compared to reports ranging from 24% to 46% pre-COVID (Chaudhry et al., 2021). A survey of providers in Canada who continued to provide harm reduction and supportive housing services during COVID-19 revealed that 80% of respondents reported a decline in their mental health (Kerman et al., 2021). Furthermore, these individuals were often putting themselves at increased risk of contracting COVID-19 due to the in-person and close interactive nature of

this work (e.g., close proximity during resuscitations) (Roxburgh et al., 2021) and a lack of personal protective equipment and supports that were offered to more regulated professionals (Olding, Barker et al. 2021).

Priorities for the Healthcare System in Canada

The issues outlined above have been recognized by federal, provincial and territorial governments as ongoing challenges. Access to care, combatting stigma, and an integrated and coordinated approach to mental health and substance use treatment have been highlighted as priorities requiring significant action (Health Canada Expert Task Force on Substance Use, 2021; Government of Canada, 2020). Internationally, the well-being of healthcare providers has been acknowledged as a necessary priority (Brand et al., 2017; World Health Organization, 2021) and national organizations such as the Canadian Medical Association have cited poor well-being among physicians as a critical risk for sustaining Canada's healthcare system (2018). There is a particular need to focus on the health of those working in mental health and substance use care. This workforce has often been overlooked in terms of integrating their practice into the public healthcare system and the personal well-being of these workers (Canadian Health Workforce Network & Mental Health Commission of Canada, 2021).

The immense toll that COVID-19 has placed on health care and service providers cannot be underestimated. For the mental health and substance use workforce, and specifically for harm reduction service providers, these impacts are further compounded by the ongoing and escalating overdose emergency, making the service gaps experienced by them and their clients all the more critical to address. The findings in our report help to further validate the impact of these system issues, and document how these challenges are experienced by those providing harm reduction services. Our results quantify the magnitude of the toll being placed on healthcare providers and lends further support to the need for appreciable investment and improvements in substance use and mental healthcare systems. The Health Canada Expert Task Force on Substance Use (2021) called for a paradigm shift in policy and highlighted that bold actions are urgently needed with new and significant investments to decrease substance use harms. In 2021, the addition of a new minister of Mental Health and Addictions signalled a readiness to make significant improvements to the mental health and substance use system.



The Current Study

Harm reduction is a critical piece of the continuum of care for those experiencing harms related to substance use (Harm Reduction International, 2020). The initial objective of this study was to gain a better understanding of how the overdose emergency was affecting individuals providing harm reduction services from their perspective. With the emergence of the COVID-19 pandemic, we expanded the objectives to identify how both the pandemic and the ongoing overdose emergency were affecting them. This included quantifying levels of grief, trauma and burnout. Another focus was to understand how these experiences may differ across gender identities, between regulated and unregulated professions, and in those who have lived or living experience with substance use. A final objective was to understand the self-care and coping strategies being used by providers to better understand beneficial supports.

To ensure services are effective, those providing harm reduction supports need the support and resources to perform to the best of their ability. We anticipate that the report will be helpful for individuals working in health policy and system planning, decision makers from all levels of government, and organization leaders and managers by identifying the resources and supports needed to prevent further harm to service providers and enhance outcomes for all in a post-pandemic world.





Method

Integrated Knowledge Mobilization Approach

We used an integrated knowledge mobilization approach to ensure that partners were included throughout the process (Canadian Institutes of Health Research, 2016). Representatives of jurisdictional and community harm reduction services participated in multiple consultations to validate the need for this research, identify key themes, refine research questions, interpret the results, identify implications and suggest actions to be implemented. This partner involvement was key to ensuring that the conclusions were appropriate and fit with the experiences and needs of service providers. We appreciate the participation of these partners (see Acknowledgements).

Data Collection

Cycle One

The first cycle of this research project collected data from July 30 to Sept. 30, 2019. In addition to demographic and harm reduction provision questions, survey respondents completed standardized measures of professional quality of life, self-care and grief. Open-ended questions were incorporated to address experiences of stigma as well as resources and supports that were available or could be beneficial if implemented. Partners reviewed the draft questionnaire to ensure the content and language were appropriate. Feedback received was incorporated into the final version. See Appendix A for the Cycle One survey.

Cycle Two

With the COVID-19 pandemic being declared less than six months after Cycle One was completed, we wanted to determine the effect of the pandemic on the same population. A revised survey was used in the second cycle of this research project to collect data from January 27 to March 8, 2021. This cycle included the measures used in Cycle One, with additional questions about whether an individual had lived or living experience with substance use, their professional regulatory status, and changes in the work environment and to workers well-being as a result of the pandemic. See Appendix B for additional questions in the Cycle Two survey.

To increase access and encourage participation across Canada, both studies were conducted online. All materials were available in English and French.

Measures

Professional Quality of Life

We used the 30-item Professional Quality of Life (ProQOL) scale to assess positive and negative experiences of providing harm reduction services to individuals who use drugs. Subscales assess levels of compassion satisfaction and compassion fatigue, including burnout and secondary trauma, in the last 30 days (Stamm, 2009). The ProQOL does not offer an option to generate a meaningful composite score, therefore the sum results from each subscale are reported separately and could range from 10 to 50.

The compassion satisfaction subscale of the ProQOL scale measures the “pleasure derived from being able to do your work well” (Stamm, 2010). This may include feeling good about helping others through your work, and feeling positivity toward your colleagues and your ability to contribute to the work setting. A higher score on this subscale reflects that a person derives great professional satisfaction from their work (Stamm, 2009, 2010). Examples of statements in this subscale include “I get satisfaction from being able to help people” and “I believe I can make a difference through my work.”

The compassion fatigue subscale measures the negative consequences of helping others (Stamm, 2010). This is a work-related phenomenon many refer to as a cost of caring and it contributes to a reduction in compassion in health care (Sinclair et al., 2017). In the context of the ProQOL measure, compassion fatigue is measured using two subscales: burnout and secondary traumatic stress.

Burnout tends to have a gradual onset and is associated with feelings of hopelessness and difficulties in dealing with work or in doing a job effectively (Stamm, 2010). The negative feelings associated with burnout can stem from a heavy workload, a non-supportive work environment or both. Higher scores reflect increased levels of burnout. Examples of statements in this subscale include “I feel worn out because of my work as a helper” and “I feel overwhelmed because my case workload seems endless.”

Secondary traumatic stress can result from hearing stories about traumatic things that have happened to others. In contrast to burnout, secondary traumatic stress has a rapid onset and is associated with a particular event or events (Stamm, 2010). Symptoms may include feeling afraid, having trouble sleeping, recurring images of the event or avoiding circumstances that might remind the person of a traumatic event. Examples of statements in this subscale include “I feel depressed because of the traumatic experiences of the people I help” and “I feel as though I am experiencing the trauma of someone I have helped.”

The ProQOL has been used with medical health professionals, social service employees, humanitarian workers (Professional Quality of Life, 2021), hospice and palliative care professionals (Alkema et al., 2008; Hotchkiss, 2018; Sansó et al., 2015), and chaplains (Hotchkiss & Leshner, 2018). Normative benchmarks among professional caregivers working with survivors of trauma have been established (De La Rosa et al., 2018) and are reported in Table 6.

Mindful Self-Care Scale

The 33-item Mindful Self-Care Scale (MSCS) assessed the frequency of use of various types of self-care over the last seven days (Cook-Cottone & Guyker, 2018). A score of 1 on the MSCS represents not performing any type of self-care within the past week, while a score of 5 represents six to seven days per week.

Ongoing practice of mindful self-care protects against the onset of symptoms of mental illness and job burnout, and improves productivity at work (Cook-Cottone & Guyker, 2018). However, mindful self-care can be difficult to maintain if the work is extremely stressful or traumatic, and particularly if supports and resources in the workplace are lacking. The scale includes six domains of self-care: physical, supportive relationships, mindful awareness, self-compassion and purpose, mindful relaxation, and supportive structure. The MSCS has been used among hospice care professionals (Hotchkiss, 2018), medical residents, caretakers for those with dementia and chaplains (Hotchkiss & Leshner, 2018).

Adult Attitude to Grief

The nine-item Adult Attitude to Grief scale assessed vulnerability to grief from losing people as a result of the overdose emergency (Sim et al., 2014). Questions comprise three subscales: resilient, controlled and overwhelmed. The sum of the scores across all subscales represents the respondent’s overall vulnerability to grief and could range from 0 to 36 (Machin et al., 2015).

Higher vulnerability to grief contributes to difficulties in managing loss and its consequences emotionally, socially and practically. It is considered to be the opposite end of the spectrum from resilience in the face of loss (Machin et al., 2015). This measure has been used among clients from community- or hospital-based bereavement services (Machin et al., 2015).

Ethics

The Advarra Institutional Review Board provided ethics approval for both cycles of the research performed for this report. A Health Canada Substance Use and Addictions Program contribution agreement with the Canadian Centre on Substance Use and Addiction (CCSA) funded the research.

Participants and Recruitment

Individuals were eligible to participate in the surveys if they lived in Canada, self-identified as providing harm reduction services and were of the age of majority for their jurisdiction (18 years old in Quebec, Alberta, Ontario, Saskatchewan, Prince Edward Island and Manitoba and 19 years old in all other jurisdictions).

Participants were recruited for both surveys using a snowball sampling method. Partners who were involved in the study’s development disseminated the survey to their extensive networks of individuals providing harm reduction services. CCSA’s Scientific Advisory Council, the Canadian Executive Council on Addictions, national opioid response partners, National Drug Checking Working Group, Canadian Community Epidemiology Network on Drug Use and addiction medicine networks also shared the survey widely. Social media and online platforms like the EENet (Evidence Exchange Network) Connect were also used to promote the survey.

Upon completion of the Cycle One survey, participants could enter a draw with a one in five chance to win a \$20 e-gift card to Tim Hortons if they provided their email address. Otherwise, individual responses were anonymous. In Cycle Two, compensation was revised based on feedback from partners. A choice of \$20 gift cards to Amazon, Walmart, Tim Hortons or President’s Choice was given to all who completed a valid survey and provided an email address. As with Cycle One, those not requesting compensation remained anonymous.



Data Analysis

The quantitative survey data were analyzed using the Statistical Package for the Social Sciences version 22. Survey respondents who included only demographic information or endorsed the same response (e.g., only selecting “Very often”) for each question within any of the three scales were excluded from the analyses. Sample sizes differed for each of the variables reported as respondents filled out the survey to varying degrees.

Analysis of covariance (ANCOVA) was used to determine if any of the outcome variables of interest (compassion satisfaction, burnout, secondary traumatic stress, grief, and stigma) differed between the two cycles. A chi-square analysis was used to determine whether the distribution of women’s and men’s reports of stigma differed between Cycle One and Cycle Two. Gender, age and number of years working in harm reduction were included as covariates for these analyses.

ANCOVA was used to determine if the independent variables (gender, lived or living experience with substance use and workers’ regulatory status) influenced any of the outcome variables. A binomial logistic regression was used to examine the influence of the independent variables on stigma for men and women separately given the dichotomous outcomes variable. These independent variables were collected in Cycle Two only, so these analyses were conducted on the data collected in 2021 only.

Participant’s age and years working in the harm reduction sector were included as covariates for these analyses.

There may have been relationships between individuals with lived or living experience and their identification as a regulated professional. However, a chi-square test revealed no significant association between these variables; thus these were included as separate independent variables in all analyses.

Few respondents identified as gender diverse (2019: $n = 17$; 2021: $n = 11$), which prevented valid and reliable comparisons of this group to those who identified as men or women. Therefore, only the responses of those who identified as men or women were included in the predictive analyses.

Qualitative analysis on the open-ended questions was conducted through the creation of code lists, and each answer was coded accordingly. Responses were given between one and five codes, depending on the complexity of the response. The coding allowed for the identification of overall themes and for a summary response to be developed for each individual question. To provide context, quotations indicate the cycle within which they were collected (i.e., C1 reported in Cycle One and C2 in Cycle Two).



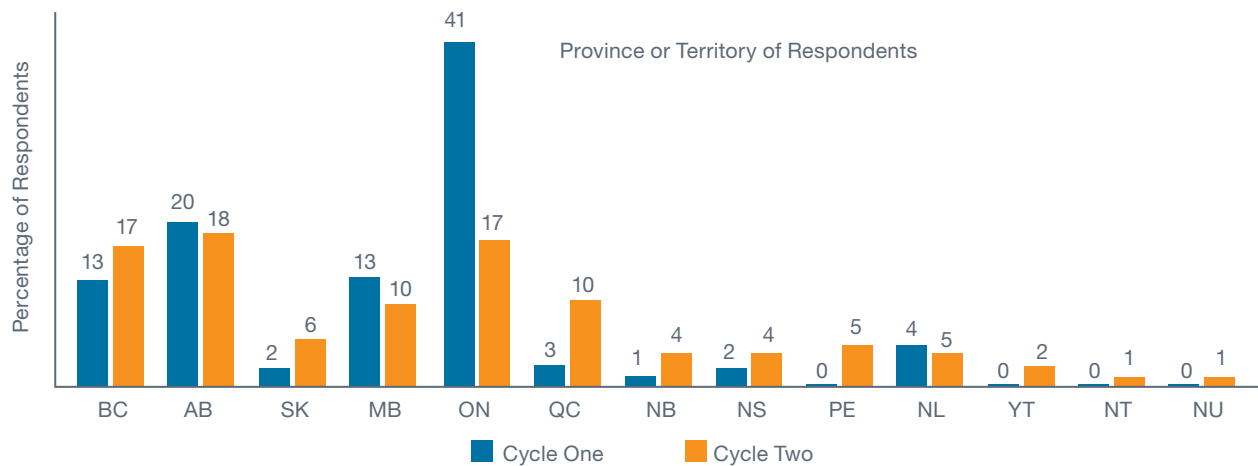


Results

Demographic Characteristics

Six hundred, fifty-one valid surveys were completed in 2019, and 1,360 were completed in 2021. The regional distribution of respondents for each survey cycle is presented in Figure 1. Most respondents were from Ontario, Alberta, British Columbia, Manitoba and Quebec.

Figure 1: Regional Distribution of Participants



The demographic profile of survey respondents from both cycles are presented in Table 1. In 2019, most respondents identified as women, whereas in 2021, most identified as men. Most respondents in both cycles were between 25 and 44 years of age. Level of education varied among participants, with a large proportion completing some form of postsecondary education in both cycles. Most respondents lived in urban or suburban environments, reported working full time and had been working in the harm reduction sector for five years or less.

Table 1: Demographic Characteristics of Survey Participants in Each Cycle, *n* (%)

Characteristic	Cycle One, 2019 (<i>n</i> = 651)	Cycle Two, 2021 (<i>n</i> = 1,360)
English	637 (97.8)	1353 (99.5)
French	14 (2.2)	7 (0.5)
Women	501 (77.3)	604 (46.7)
Men	130 (20.1)	678 (52.4)
Gender diverse	17 (2.6)	11 (0.9)
Lived or living experience with substance use	—	772 (59.1)
No lived or living experience with substance use	—	463 (35.4)
Regulated profession	—	624 (45.9)
Unregulated profession	—	637 (46.8)
18 to 24 years old	39 (6.2)	214 (18.7)
25 to 44 years old	410 (64.8)	828 (72.2)
45 to 64 years old	169 (26.7)	101 (8.8)
65 years or older	15 (2.4)	4 (0.3)
Less than high school	8 (1.2)	94 (6.9)
High school diploma	17 (2.6)	181 (13.3)
General Ed. Dev. (GED) or Adult Basic Ed. (ABED)	3 (0.5)	88 (6.5)
Some college or technical school	28 (4.3)	180 (13.2)
College or technical school graduate	125 (19.3)	310 (22.8)
Undergraduate university degree	285 (43.7)	356 (26.2)
Professional degree (e.g., law, medicine)	64 (9.9)	78 (5.7)
Graduate degree (master's or doctorate)	115 (17.8)	48 (3.5)
Other	2 (0.3)	16 (1.2)
Urban or suburban (in a city or town)	572 (87.9)	905 (66.5)
Rural (short drive to city or town)	55 (8.4)	305 (22.5)
Remote or isolated (great distance from city/town)	23 (3.5)	191 (14.0)
Not sure	—	10 (0.7)
Prefer not to say	—	4 (0.3)
Full-time employee	491 (75.4)	735 (54.0)
Part-time employee	127 (19.5)	380 (27.9)
Full-time volunteer	5 (0.8)	103 (7.6)
Part-time volunteer	36 (5.5)	212 (15.6)
2 years or less working in harm reduction	190 (29.2)	380 (27.9)
3 to 5 years working in harm reduction	147 (24.7)	393 (28.9)
6 to 10 years working in harm reduction	133 (22.4)	211 (15.5)
11 to 20 years working in harm reduction	102 (17.2)	62 (4.6)
21 years or more working in harm reduction	22 (3.7)	13 (1.0)

Note. — = not available



Services and Settings

Respondents were asked about the type of harm reduction services they offered and the settings these services were provided in. Participants were permitted to select multiple options if they provided more than one form of harm reduction service, and similarly could indicate if they practised in multiple settings. Accordingly, the numbers reported below do not represent unique cases, and the total percentage reported may add up to more than 100%.

Cycle One

The proportions of respondents providing each type of service in 2019 is reported in Table 2. Nearly 13% of respondents reported providing services that were not captured in the options provided and were grouped into an “other” category. These participants specified service provisions such as sexual health services, housing supports, children’s services and crisis support. While the number of those in the “other” category is considerable, each of the above-mentioned examples made up less than 1% of the sample, so they are presented together.

Table 2: Services Provided by Survey Respondents in Cycle One (*n* = 651)

Type of service provided	<i>n</i> (%)
Safer substance use and harm reduction education	557 (85.6)
Referral to treatment	472 (72.5)
Navigation of services including health, housing, social assistance, etc.	460 (70.7)
Needle/harm reduction supplies/equipment distribution	442 (67.9)
Overdose response training and naloxone distribution	435 (66.8)
Counselling	393 (60.4)
Training or supporting peers that I work with	299 (45.9)
Peer providing support services to others	170 (26.1)
Drug checking/testing	161 (24.7)
Street patrol/overdose response team	133 (20.4)
Opioid agonist therapy	119 (18.3)
Other	83 (12.8)
Pharmacy	21 (3.2)

Table 3 outlines the proportions of respondents working in each type of setting. Again, a significant proportion of individuals reported working in settings that were not captured in the survey options (Table 3). These encompassed AIDS service organizations, drop-in centres and acute care settings (e.g., emergency departments) and were grouped into an “other” category. While the number of those in the “other” category is quite large, each of the examples made up less than one per cent of the sample, so they remain grouped together.

Table 3: Settings in Which Survey Respondents Worked ($n = 651$)

Type of setting	n (%)
Other	164 (25.2)
Supervised consumption site	148 (22.7)
Addiction treatment program in a community	133 (20.4)
Community health centre	133 (20.4)
Outreach, including needle pick up and sweep	124 (19)
Public health unit	103 (15.8)
Organizations of people who use drugs	84 (12.9)
Community outreach team/ACT (assertive community treatment) team	80 (12.3)
Overdose prevention site	60 (9.2)
Addiction treatment program in a hospital	35 (5.4)
Indigenous agency/friendship centres	27 (4.1)
Family practice/Family health centre	15 (2.3)
Pharmacy	12 (1.8)
EMT [emergency medical team]/First response	7 (1.1)

Cycle Two

In 2021, the questions about services and settings were revised slightly to determine the amount of time individuals were spending providing each type of service (Table 4) and working in each setting (Table 5). The responses demonstrate the variety and breadth of work that individuals working in harm reduction perform.

Table 4: Services Provided by Survey Respondents in Cycle Two ($n = 1,360$), n (%)

Type of service provided	Most of the time	Much of the time	Some of the time	A little bit of the time	None of the time
Helping clients navigate services	145 (10.7)	309 (22.7)	422 (31.0)	331 (24.3)	112 (8.2)
Safer substance use and harm reduction education	136 (10.0)	266 (19.6)	471 (34.6)	372 (27.4)	75 (5.5)
Counselling	132 (9.7)	304 (22.3)	390 (28.7)	339 (24.9)	153 (11.3)
Naloxone distribution	128 (9.4)	265 (19.5)	409 (30.1)	379 (27.9)	147 (10.8)
Needle, harm reduction supplies, equipment distribution	121 (8.9)	258 (19.0)	448 (32.9)	370 (27.2)	145 (10.7)
Street patrol, community outreach team, overdose response activities	118 (8.7)	302 (22.2)	354 (26.0)	328 (24.1)	218 (16.0)
Training or supporting coworkers	111 (8.2)	308 (22.6)	445 (32.7)	360 (26.5)	98 (7.2)
Referring clients to treatment	109 (8.0)	284 (20.9)	448 (32.9)	360 (26.5)	112 (8.2)
Overdose response training	95 (7.0)	273 (20.1)	464 (34.1)	355 (26.1)	138 (10.1)
In-pharmacy services (e.g., opioid agonist therapy administration, filing prescriptions)	90 (6.6)	193 (14.2)	388 (28.5)	283 (20.8)	363 (26.7)
Opioid agonist therapy	85 (6.3)	203 (14.9)	366 (26.9)	339 (24.9)	319 (23.5)
Drug checking or testing	69 (5.1)	226 (16.6)	358 (26.3)	248 (25.6)	315 (23.2)
Emergency medical technician or other first response	66 (4.9)	224 (16.5)	354 (26.0)	345 (25.4)	325 (23.9)

**Table 5:** Settings in Which Services Were Provided in Cycle Two ($n = 1,360$), n (%)

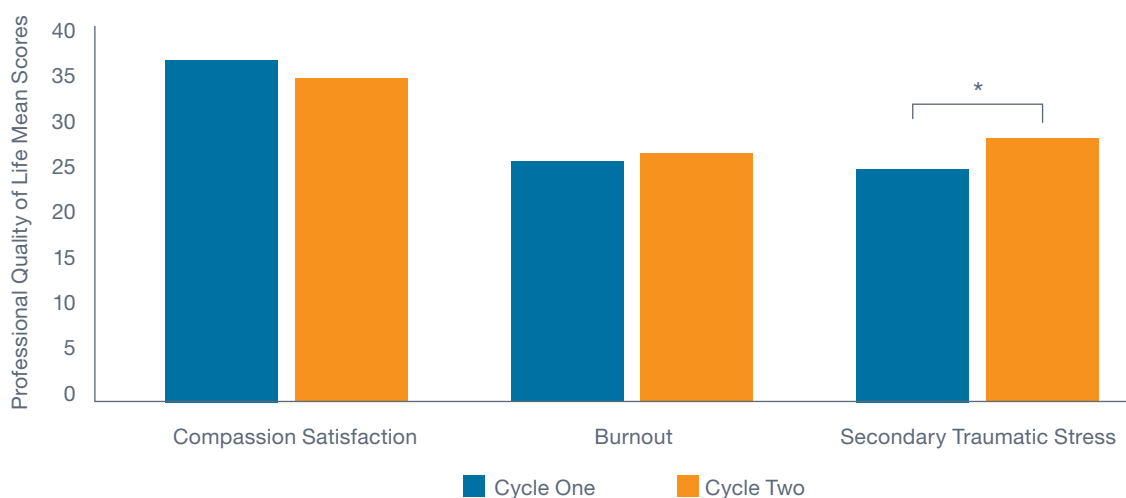
Type of service provided	Most of the time	Much of the time	Some of the time	A little bit of the time	None of the time
Community health centre	138 (10.1)	250 (18.4)	402 (29.6)	262 (19.3)	259 (19.0)
Community addiction treatment program	115 (8.5)	225 (16.5)	391 (28.7)	279 (20.5)	300 (22.1)
Organization of people who use substances of user group	114 (8.4)	216 (15.9)	417 (30.7)	320 (23.5)	248 (18.2)
Mobile or assertive community outreach team	112 (8.2)	218 (16.0)	377 (27.7)	333 (24.5)	267 (19.6)
Public health unit	89 (6.5)	212 (15.6)	370 (27.2)	318 (23.4)	322 (23.7)
Supervised consumption site	88 (6.5)	150 (11.0)	331 (24.3)	404 (29.7)	348 (25.6)
Overdose prevention site	71 (5.3)	185 (13.6)	354 (26.0)	353 (25.9)	341 (25.1)
Opioid agonist therapy clinic	70 (5.1)	240 (17.6)	331 (24.3)	317 (23.3)	355 (26.1)
Indigenous agency or friendship centre	68 (5.0)	224 (16.5)	338 (24.9)	336 (24.7)	336 (24.7)
Hospital addiction treatment program	65 (4.8)	231 (17.0)	327 (24.0)	313 (23.0)	374 (27.5)
Family practice or health team clinic	56 (4.1)	229 (16.8)	320 (23.5)	338 (24.9)	361 (26.5)
Pharmacy	53 (3.9)	230 (16.9)	320 (23.5)	312 (22.9)	382 (28.1)
Rapid access addiction medicine clinic	51 (3.8)	215 (15.8)	368 (27.1)	286 (21.0)	393 (28.9)

Professional Quality of Life: Quantitative Findings

Professional quality of life was explored to assess the positive and negative experiences of providing harm reduction services to individuals who use drugs. Subscales reflected compassion satisfaction, burnout and secondary traumatic stress.

Compassion Satisfaction

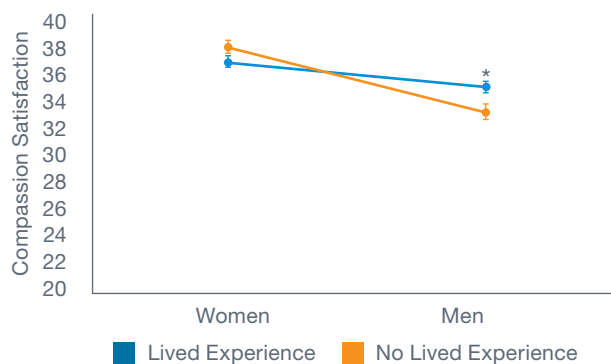
Overall, reported experiences of compassion satisfaction were moderately high and did not differ between Cycle One ($M = 36.7$, $SD = 6.11$) and Cycle Two ($M = 35.5$, $SD = 7.00$; $F[1, 1491] = .325$, $p = .569$). Compassion satisfaction differed by participants' gender, lived or living experience, and regulatory status.

Figure 2: Mean Professional Quality of Life Scores for Cycle One and Cycle Two

Note. * = $p < .05$.

Significantly greater levels of compassion satisfaction were reported by women ($M = 37.44$, $SE = .333$) compared with men ($M = 25.98$, $SE = .356$; $F[1, 859] = 50.77$, $p < .01$) and by those working in regulated roles ($M = 36.22$, $SE = .342$) compared with those in unregulated roles ($M = 35.16$, $SE = .343$; $F[1, 859] = 4.77$, $p = .029$). Levels of compassion satisfaction did not differ solely by experiences of lived or living experience ($F[1, 859] = .59$, $p = .445$). But an interaction between gender and lived or living experience was observed ($F[1, 865] = 10.543$, $p = .001$) and having lived experience resulted in greater compassion satisfaction scores for men (lived experience: $M = 34.91$, $SE = .385$; no lived experience: $M = 32.97$, $SE = .598$; $p = .006$) but not women (lived experience: $M = 36.84$, $SE = .453$; no lived experience: $M = 38.03$, $SE = .483$; $p = .66$; Figure 3).

Figure 3: Mean Compassion Satisfaction Levels as a Function of Gender and Lived Experience



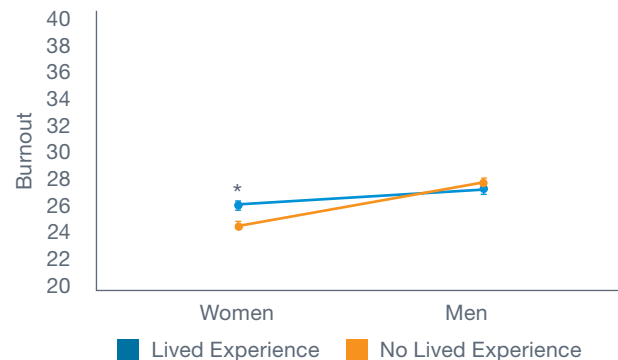
Note. * = $p < .05$.

Burnout

Generally, levels of burnout were moderate and remained fairly consistent from Cycle One ($M = 26$, $SD = 4.7$) to Cycle Two ($M = 26.6$, $SD = 5.5$; $F[1, 1491] = 3.73$, $p = .054$) (Figure 2).

Higher levels of burnout were reported by men ($M = 27.66$, $SE = .275$) than women ($M = 25.30$, $SE = .258$; $F[1, 865] = 38.50$, $p < .001$) and by those working in unregulated roles ($M = 27.25$, $SE = .267$) than regulated ones ($M = 25.72$, $SE = .263$; $F[1, 865] = 16.54$, $p < .01$). Reported levels of burnout did not differ between those with lived experience ($M = 26.76$, $SE = .23$) compared with those without ($M = 26.19$, $SE = .296$; $F[1, 865] = 2.32$, $p = .128$). But lived experience interacted with gender to predict levels of burnout ($F[1, 865] = 8.76$, $p = .003$), such that having lived experience resulted in greater levels of burnout for women (lived experience: $M = 26.14$, $SE = .351$; no lived experience: $M = 24.46$, $SE = .374$; $p = .001$) but not men (lived experience: $M = 27.39$, $SE = .298$; no lived experience: $M = 27.93$, $SE = .461$; $p = .33$; Figure 4).

Figure 4: Mean Burnout Levels as a Function of Gender and Lived Experience



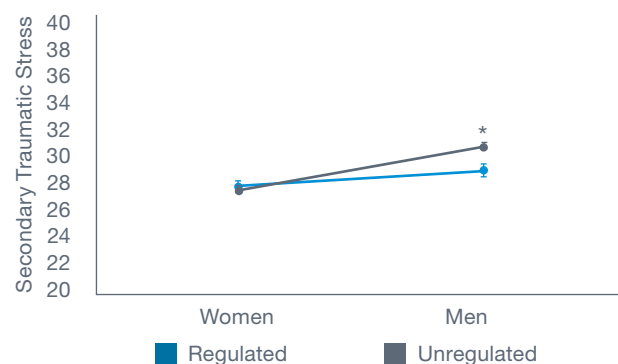
Note. * = $p < .05$.

Secondary Traumatic Stress

Overall, levels of secondary traumatic stress were initially moderate and increased significantly from Cycle One ($M = 25.6$, $SD = 7.4$) to Cycle Two, ($M = 28.7$, $SD = 6.7$; $F[1, 1491] = 16.25$, $p < .001$) (Figure 2).

Like burnout, men reported greater levels of secondary traumatic stress ($M = 29.53$, $SE = .321$) than women ($M = 27.25$, $SE = .303$; $F[1, 865] = 26.27$, $p < .01$). Secondary traumatic stress did not differ by regulatory status (regulated $M = 25.72$, $SE = .263$; unregulated $M = 27.25$, $SE = .267$; $F[1, 865] = 1.30$, $p = .255$). But those with lived experience reported higher scores on secondary traumatic stress ($M = 29.56$, $SE = .270$) than those without ($M = 27.219$, $SE = .346$; $F[1, 865] = 28.189$, $p < .01$). Moreover, gender and regulatory status interacted to predict secondary traumatic stress ($F[1, 865] = 4.868$, $p = .028$), where working in an unregulated role predicted greater secondary traumatic stress for men (regulated: $M = 30.26$, $SE = .420$; unregulated: $M = 28.79$, $SE = .484$; $p = .022$) but not women (regulated: $M = 27.48$, $SE = .385$; unregulated: $M = 27.02$, $SE = .465$; $p = .44$; Figure 5).

Figure 5: Mean Secondary Traumatic Stress levels as a Function of Gender and Regulatory Status



Note. * = $p < .05$.



Professional Quality of Life: Qualitative Findings

To allow respondents to provide more details about their professional quality of life, we asked “Is there anything else about your professional quality of life that you’d like to share?” The question did not ask respondents to elaborate on each specific subscale but on overall professional quality of life. In total, 38% ($n = 250$) of Cycle One respondents and 18% ($n = 242$) of Cycle Two respondents provided a response to this question. Among those who responded, the main themes included respondents liking what they do, feeling supported and believing harm reduction work is important.

“ I’ve always been an advocate for harm reduction practices and it’s just by chance I got into this work, soon to be entering into the harm reduction program as one of my key roles. I’m very excited for the opportunity and believe I’m a personality that would do well in harm reduction. (C1)

“ I love my work and the people I am privileged to serve, although not having enough community-based services to help them is extremely difficult. (C1)

“ I love my job and simultaneously wish it didn’t have to exist. I couldn’t imagine doing nothing about the overdose crisis. It is an honour to be paid for something I am so passionate about, but also hard to be engaged in what seems like such an endless battle with governments to value the lives of people like me. (C2)

As demonstrated above, many respondents also expressed various reasons for frustration and dissatisfaction with their professional quality of life. Themes for this question included wanting to see improvements to working conditions, increased benefits and compensation, improved services and supports for clients, increased government support and funding, increased awareness of and support specific for the overdose emergency and harm reduction work, and improved management.

“ The system is what affects the quality of my professional life, rarely the clients. The system calls it burnout — I prefer the term constant moral assault. (C1)

“ Grief, loss and burnout are very real. It is tough to do this work with few supports and stigma from rural communities. (C2)

“ Agency systems, governments, policies, and politics make it hard to provide the best care for people in the community that need harm reduction services. (C1)

Cycle Two respondents reported COVID-19 related issues impacting their professional quality of life, such as reduced services and public health restrictions due to the pandemic.

“ During the pandemic, I have lost access to things that improve my mental health, like flexible scheduling and vacation time. Demand for the services my team provides has never been higher, and there has been no acknowledgement of the risks that we are taking or the services we are providing. (C2)

“ COVID-19 has increased stress levels when interacting with people because of the restrictions and the fear of infection. (C2)



Work-Related Changes During COVID-19

Cycle Two respondents were asked whether their feelings about their work or the ways in which their work impacts their quality of life changed since the start of the COVID-19 pandemic. Almost a quarter of respondents (24%, $n = 326$) confirmed that they had. To better understand these work-related changes, respondents were asked to describe what had changed and what they thought were the reasons for these changes. The main theme was the impacts on the type and quality of care they could provide clients, which was reported by 39% ($n = 128$) of those who responded. This includes lack of supplies and limited resources, need for in-person interactions and the inability to assist clients who do not have access to the internet or other communication devices.

“Many barriers have arisen for users of safe consumption sites: masks, social distancing, protocols for access for some facilities, etc. A lot of the population struggling with addiction get frustrated with the rules in place, so they choose to just use alone. Some die because of this. (C2)”

“More barriers to services for client’s which makes my job harder, and I feel more helpless to empower people. (C2)”

Other themes included reduced program and service accessibility and availability for clients, increased workload, increased fatigue and burnout, increased isolation and limited socialization, and changed mental health status.

“The workload keeps piling up. Personally, I feel more tired than before. (C2)”

“I’m aware that my own personal stress leaves me with less to give or to offer at work. I have to be very measured with my energy and conserve it where I can. I can’t extend myself as much as I did pre-COVID. (C2)”

“It seems like there is more need and few resources. (C2)”

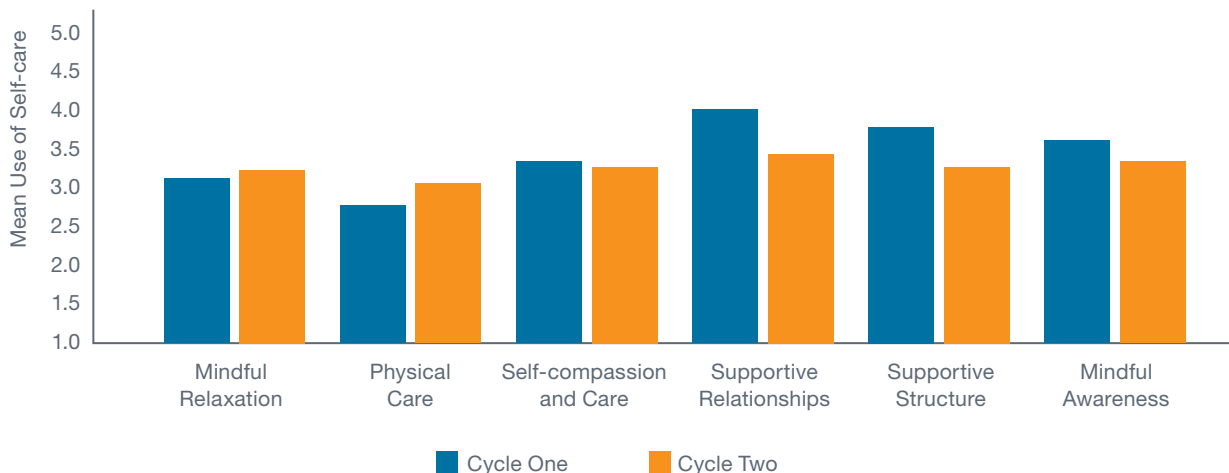
A few respondents mentioned an increase in positive work-related changes since the start of the pandemic. Such changes included the ability to help clients, the community and society in general, as well as finding their work more meaningful and motivating.

“I feel that the work has become more vital. With COVID-related shutdowns, moving or changes of services, it has become more important to be a reliable, consistent source of harm reduction resources including supplies. (C2)”

Self-Care: Quantitative Findings

In general, participants used self-care practices an average of two to three days per week (Figure 6).

Figure 6: Using Self-Care Practices in Cycle One and Cycle Two





Among the measured subtypes, some showed a statistically significant effect of gender, lived experience or regulatory status. The greatest difference was for mindful relaxation, which was used more often by those with lived experience ($M = 3.40$, $SE = .36$) compared with those without ($M = 3.20$, $SE = .47$, $F[1, 881] = 18.949$, $p < .001$). Despite this statistical significance, the difference was small (that is, people performed self-care the same number of days per week), so this finding is likely not clinically meaningful. Other subdomain scores with statistically significant group differences were even smaller than the mindful relaxation.

Comparison of self-care between Cycle 1 and Cycle 2 revealed some statistically significant differences. Mindful relaxation and physical care were used more frequently during Cycle Two than Cycle One. Supportive relationships, supportive structure and mindful awareness were used less frequently (Figure 6). Again, these differences were small and not considered meaningful in practice.

Self-Care: Qualitative Findings

To better understand the types of self-care that harm reduction providers participated in, we asked respondents whether there was anything else they would like to tell us about these practices. One-fifth of the respondents from Cycle One (22%; $n = 143$) and Cycle Two (19%; $n = 259$) provided details. Overall, practising physical activities and mental health self-care activities, as well as engaging in positive self-care practices (healthy work-life balance, being mindful of personal self-care, finding hobbies and activities, and spending time in nature) were the most frequently mentioned themes.

“Regular exercise and fresh air are absolutely necessary for me to maintain my mental health. I make this a priority over almost everything else in my life. (C1)”

“We have made having a meal together or snack together around the table a daily thing. No phones, just talk and listen. (C2)”

“Doing something good for your health will make you thank yourself for who you are now. (C2)”

COVID-19 precautions, such as following basic hygiene standards, as well as finding ways to socialize and being less isolated were other themes reported in Cycle Two.

“I have regularly reminded our staff and collaterals [colleagues or clients] that it is ok to not be able to be 100% at this time. We are good at reiterating this to our clients but don't allow ourselves the same courtesy. (C2)”

“I think keeping a social distance, wearing a mask and washing your hands are three things that can help reduce the risk of infection. (C2)”

“Pay more attention to hygiene and wash your hands frequently. (C2)”

Self-Care Practice Changed During COVID-19

Among the Cycle Two respondents, 22% ($n = 294$) indicated that their self-care practices had changed since the start of the pandemic. Respondents were asked to describe how their self-care practices had changed since the start of the pandemic and the reasons they believed these changes occurred. The main theme was increased isolation and limited socialization, which was reported by 37% ($n = 108$) of those who provided a response.

“I rarely leave the house, so I don't often do physical or social activities. (C2)”

Almost 32% of respondents ($n = 94$) who noticed a change mentioned doing a variety of positive self-care activities. These activities included focusing on physical activity; finding more activities and new hobbies; staying connected with friends, family and colleagues; spending more time in nature; and eating healthier.

“I have found new creative outlets that I can do at home and on my own. I get out a lot more with my dog and take in nature and the fresh air (when it is not -35). I also have been meal prepping more as I spend more time at home, so it is easier to prepare. (C2)”

“I have had to be more intentional about self-care instead of passive. Many of our employees have gone on leave during this time, so we are focusing on self-care. I have started planning my meals and exercise ahead of time, so I am not caught up in decision making after work. (C2)”



Other themes included an increased focus on wellness and self-care, being more cautious (e.g., washing hands, social distancing, wearing a mask) and the challenges of following healthier self-care practices (e.g., weight gain, sedentary lifestyle, feeling more anxious, lack of motivation, lack of sleep, struggles with work-life balance).

“ It really is difficult to balance work and life, and attempts at self-care. (C2)

“ During the first six months of the pandemic, I was depressed and sedentary, making very poor food choices. In August, I decided to change my ways and get involved with life coaches, and I have been exercising and working out since. (C2)

“ Pay attention to hygiene, wash your hands frequently, wear a mask when you go out and avoid crowded places. (C2)

Vulnerability to Grief: Quantitative Findings

Generally, levels of vulnerability to grief were moderate in Cycle One ($M = 14.91$, $SD = 4.14$) and increased significantly in Cycle Two ($M = 17.16$, $SD = 3.74$, $F[1, 1466] = 42.54$, $p < .001$).

Men reported significantly more vulnerability to grief ($M = 17.30$, $SE = .199$) than women ($M = 16.70$, $SE = .186$, $F[1, 869] = 4.803$, $p = .029$). Those in unregulated roles reported more vulnerability to grief ($M = 17.41$, $SE = .192$) compared with those in regulated roles ($M = 16.58$, $SE = .191$, $F[1, 869] = 9.31$, $p = .002$). Those with lived or living experience reported more vulnerability to grief ($M = 17.28$, $SE = .166$) than those without such experiences ($M = 16.70$, $SE = .214$, $F[1, 865] = 4.517$, $p = .034$).

Vulnerability to Grief: Qualitative Findings

We asked respondents whether there was anything else they wanted to share about their grief: 22% ($n = 142$) of Cycle One respondents and 15% ($n = 200$) of Cycle Two respondents shared additional information with support shared as a common theme. Many indicated that although support through the grieving process was important, it was not always available or accessible, and that it is difficult to deal with grief in general.

“ I find it is always a struggle between wanting to support those affected by the death in the moment and being gentle with yourself as you are also grieving. It's a difficult balance. (C2)

Another common theme emerging from respondents was the importance of acknowledging that everyone deals with grief differently, and that grief can be difficult to process when you work with individuals who experience grief and loss regularly.

“ When a patient [or] client dies, it is actually necessary for me to take a short mindful break and then continue my workday. It's difficult to explain why exactly I feel the need to keep going. I think I do this for a variety of reasons. For example, I believe I need to keep working, otherwise the loss of one could contribute to the loss of another, and I won't allow that to happen. I also process loss and death over a period of time, perhaps several days, and can continue to process the person's death while I am continuing to live. (C1)

“ Grief for me is always going to weigh heavy. I find one of the hardest aspects of grief is finding a balance between opening up to new life and new joy while still engaging with the grief as such an important part of present experience. It is a confusing thing to have to accomplish, and in my experience, it has been difficult to find valuable guidance in this area as well as the opportunity to express and share experience with grief. (C1)

Cycle Two respondents who provided a response described experiencing more death and grief because of the COVID-19 pandemic as well as changes in their mental health and well-being.

“ We lose someone daily. I feel like we don't got time to grieve. (C2)

“ Two coworkers in our tiny organization have passed away since the beginning of the pandemic. This is another layer on top of the frequent deaths of clients. (C2)

“ I am saddened by the deaths and injuries caused by the pandemic and urge everyone to take precautions. (C2)



Interestingly, 15% ($n = 30$) of Cycle Two respondents who answered this question noted the importance of remaining positive and adopting an optimistic attitude in the midst of the pandemic.

“Positive and optimistic attitude is very important; we must have a good attitude to overcome difficulties. (C2)

Changes in Vulnerability to Grief During COVID-19

When respondents were asked whether they had noticed changes in their grief responses and feelings since the start of the pandemic, nearly 10% ($n = 130$) of all Cycle Two respondents confirmed that they had. These respondents were asked to detail the changes and the reasons they believed their grief responses had changed. The main theme emerging from participant responses was increased amounts of death and grief, which was reported by 43% ($n = 56$) of those who had responded.

“I think the pandemic has made me acutely aware of the increased risks for those who use substances and therefore the increased risk of overdose death. (C2)

Other themes included challenges created by the pandemic (e.g., following public health guidelines, social isolation, inability to gather with family after loss) and unhealthy changes in mental health and well-being (e.g., increased fear, anxiety, feelings of sadness).

“I think I'm more sensitive. Due to the length of the pandemic, some feelings of frustration and helplessness. Need to be aware and address these feelings and correcting myself. (C2)

“We are more isolated, so it makes it hard to receive support for grieving. (C2)

Some respondents described adopting a more positive outlook, including being more optimistic, cherishing life and being better equipped to cope with grief and loss.

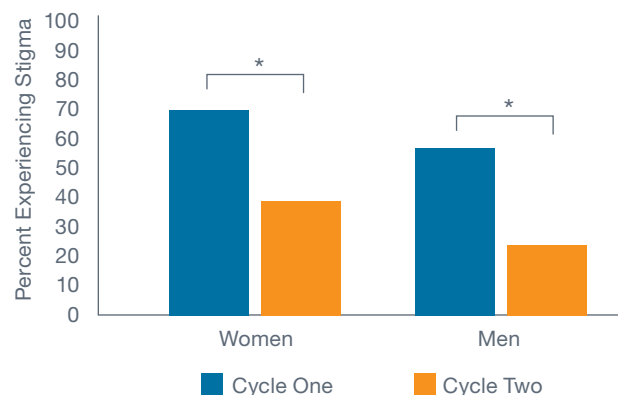
“The pandemic has given me new skills to cope, and the experience of this loss has shown me some new skills that I have for coping. (C2)

Stigma: Quantitative Findings

Among women, no significant associations were observed between their reported experiences with stigma about their harm reduction work and having lived or living experience with substance use nor being in a regulated role. Among men, no association was found between their reported experiences with stigma about their harm reduction work and having lived or living experience with substance use. However, men working in regulated roles were less likely to report being stigmatized, compared with those working in unregulated roles ($OR = .556$, 95% CI [.363, .883], $p < .05$).

Women reported significantly more experiences of stigma in Cycle One (70.2%), compared with Cycle Two (39.8% and 57.3%, respectively, $Y^2(2) = 96.805$, $p < .01$), and compared with men (57.3% and 24.2%, respectively, $X^2(2) = 52.519$, $p < .001$) (Figure 7).

Figure 7: Experiences of Stigma for Men and Women in Cycle One and Cycle Two



Note. * = $p < .05$.



Stigma: Qualitative Findings

Among those who said they felt stigmatized about their work in harm reduction, 59% ($n = 387$) of Cycle One respondents and 16% ($n = 224$) of Cycle Two respondents described the ways in which they felt stigmatized. Many felt other people's perceptions, judgments and negative expectations of harm reduction were the main reasons they felt stigmatized. Respondents highlighted a general lack of education, awareness and understanding of the work they do as another reason for feeling stigmatized.

“

Overall, people do not understand the extent of the work we do. It is hard to feel like you always have to educate or defend what you are doing. This makes it feel as though the progress made is not acknowledged. (C1)

”

“

Some people associate supervised consumption services as enablers of addictions, which seems to be, in their mind, as parasitic as addiction itself. I am proud of the work I do, but I don't love to talk about my job with strangers because I fear they will treat me differently after they realize I help people use drugs safer. (C1)

“

I notice [stigma] when I am being noticed by community members. I notice [stigma] when I am being noticed when reaching out to a street-involved person (e.g., individual managing homelessness, addiction, sex work) in public locations. I have also experienced stigma in my family. I have several family members [who] don't agree certain services like overdose prevention or safe supplies should be available to individuals living with addiction. (C1)

“

I live in a small, conservative province and many people, including members of my own family, have very strong negative opinions on harm reduction programs. I spend so much of my personal (unpaid) time battling stigma and educating people on the merits of harm reduction. So many people think safe works access programs just enable and encourage people, and they do NOT support their tax dollars going toward paying for them. (C2)

Other common themes reported by respondents in Cycle One and Cycle Two included discrimination and a lack of community support, including disrespect from health and social care professionals, as well as experiencing verbal and physical threats.

“

Especially in a politically hostile environment, when I meet new people, I am cautious around talking about my work and certain parts of my identity. This comes from fear of violence, fear of being judged for the ways in which I care about people. (C1)

“

Community members seem to have a limited understanding of what harm reduction is and how it can affect them in a positive manner. Occasionally, I will come across a community member [who] is disrespectful to myself and those I work with. It encourages me to continue to push the barriers of stigma and break down marginalization of those most vulnerable. (C2)

“

I work in a hospital setting but provide community treatment. There continues to be stigma from staff persons within the hospital toward the clinic, myself and the clients. Staff refusing to help treat the clients [or] rude toward myself and clients. (C2)



COVID-19 and Work-Related Stigma

Cycle Two respondents were asked whether their experiences of work-related stigma had changed since the start of the pandemic. About 4% ($n = 54$) of surveyed respondents confirmed that they had. Respondents were asked to describe these changes and why they believed their experiences of work-related stigma had changed. Several Cycle Two respondents reported experiencing work-related stigma in other sections of the survey, specifically sections relating to their professional quality of life and work experiences.

“ It’s gotten worse. Watching overdoses double and there is no additional help. We are burning out and there is so little political will. Even other organizations contribute to this stigma. (C2)

“ I work in a shelter, and there have been many outbreaks of COVID-19 over the past year. Friends and family won’t see me even if we follow proper social distancing and masking protocols out of fear of being exposed. I understand their concern, and I share it with them. It’s a lonely way to live though. (C2)

Among those who responded to this question, a few described a decrease in harm reduction stigma since the start of the pandemic as well as increased support (e.g., help, donations).

“ In our town, there have been a few places that previously would not embrace the harm reduction model (both shelters) that have moved to acceptance. One of them has even started providing supplies themselves and allowing supervised injection on site. The other is no longer kicking people out for paraphernalia. (C2)

Resources, Programs and Supports: Qualitative Findings

To determine what was in place to support workers in their workplaces, we asked respondents to tell us what supports and resources they feel are already in place that are helpful to them in their role. 76% ($n = 494$) of Cycle One respondents and 44% ($n = 599$) of Cycle Two respondents provided an answer to this question. Among those who responded, many indicated having access to the services they needed. The main themes included:

- Employee-specific supports (e.g., counselling, employee assistance programs, support groups, team meetings and debriefings, benefits),
- Professional and agency supports (e.g., staffing support like nurses and outreach teams),
- Supportive supervisors,
- Good partner agencies,
- Good education and training programs),
- Community and peer supports (e.g., support through family, friends and colleagues, or a supportive community), and
- Program supports (e.g., good rehab and detox programs).

Below are a few representative quotations from respondents that support these key themes:

“ Supportive team who meets regularly to support one another and discuss difficult cases. The availability of [an] employee assistance plan to provide paid counselling service if necessary. (C1)

“ I have a great work environment and team. My manager is supportive. There are online resources for employees, and I believe that if I needed to reach out, I would be able to — although this may be in the neighbouring community and would require me to travel for face-to-face services. (C1)

“ The consistent support of my peers, coworkers and like-minded individuals who share the same goal. Having places like [name of local service] also are helpful for us staff in the community, and it’s helpful to redirect our clients to them as well as for clean supplies [or] resources. (C2)



“ We have a professional [employee assistance] program, which gives us access to counselling [and] therapy. My team manager is quite supportive. My team is very supportive. (C2)

In addition, a major theme mentioned by several Cycle Two respondents included the presence of specific resources for COVID-19, such as pandemic-related supports, equipment and supplies, as well as volunteer resources. Furthermore, a few indicated the need for more funding and financial supports for harm reduction workers.

“ Disinfectant for masks and protective clothing. (C2)

“ There should be financial and material support. (C2)

“ We provide education to staff and clients regarding harm reduction and also places they can access support. (C2)

Finally, a few respondents from both cycles indicated that supports and resources were either not available to them, or their access to such supports and resources was very limited.

“ No opportunities to meet as a team, no formal debriefing structure after traumatic events, no performance review [nor] check-in time, no clinical supervision. When I asked about supports [and] resources, I was referred to EAP [employee assistance program] counselling (five sessions max.). (C1)

“ I do not currently have any supports in place beyond myself. (C2)

Lack of Supports for Work and Well-Being in the Workplace

To determine what needs were not being met in the work context, we asked respondents what they felt was lacking in terms of how their work and well-being were being supported. 69% of Cycle One respondents ($n = 449$) and 34% of Cycle Two respondents ($n = 457$) provided an answer to this question.

The increased need for support was a common theme, including:

- Employee-specific supports and resources (e.g., better communication, increased benefits, more debriefings and team meetings),
- Resource supports (e.g., counselling, mental health supports),
- Professional and agency supports (e.g., hire more staff to keep up with demands),
- Resources specific to harm reduction and substance use (e.g., supervised consumption sites, addiction supports),
- Educational support (e.g., training and educational opportunities),
- Financial supports (e.g., need for increased funding, government support) and
- Community supports.

Here are a few representative quotations from respondents that support these key themes:

“ Lots of nice talk about our values but not backed up with action; lack of resources to do the work; lack of education and a commitment to harm reduction principles across the organization; trauma therapy easily accessible and as long as it needs to be. (C1)

“ My insurance does not cover enough counselling. \$500 a year is not enough. (C2)

“ In [jurisdiction name] with the merger into a provincial system, local supports have been eliminated and budget lines for any extras have disappeared. We are told funding is in a crisis and there's no money for anything. Job and budget cuts are pending. There is plenty of opportunity for change; however, leadership would need to see value in employee engagement, employee training, employee growth and employee retention throughout the continuum of addiction services. (C1)

“ More training for all levels of workers, safe spaces for community members to access while using. (C2)



Cycle Two respondents also reported the need for supports related to COVID-19, such as social distancing and other public health restrictions, personal protective equipment and sanitizer, as well as increased equipment, supplies and physical safety supports for clients (e.g., housing supports, emergency shelter spaces).

“ Increase protection measures, take temperature checks on personnel and distribute masks. (C2)

“ Need more funding for increase[d] hours and staff. Staff should be better supported to isolate if [they] have symptoms and return to work if negative... not punished for sick time because they stayed home when experiencing symptom[s]. (C2)

“ Residential treatment programs are unavailable. There is a severe lack of housing for vulnerable populations to stabilize them and support them to get to treatment. In-patient services are working poorly with community services. There is no collaboration. (C2)

“ Safe shelters, efficient housing supports, sufficient meal supports, bathroom access. (C2)

COVID-19 Related Changes to Resources and Supports

Cycle Two respondents were asked whether the types of resources, programs and supports they had access to or how they accessed these services had changed since the start of the COVID-19 pandemic. In total, about 20% ($n = 279$) answered “Yes.”

We asked respondents to describe what had changed and the reasons why they perceived this change. Overall, lack of services and resources (e.g., limited services, discontinued services) and increased virtual services and online counselling were the two most mentioned themes, reported by 43% of those who responded to the question.

“ Very difficult for clients to access health care during a pandemic. However, virtual OAT [opioid agonist therapy] programs have been a real positive for clients required to isolate during COVID. (C2)

“ There doesn’t seem to be as much room in shelters for our clients or warm places in general. (C2)

Other themes reported as a result of the pandemic included the inability to access services (e.g., reduced hours, limited capacity for clients, longer wait times) and the lack of in-person services (e.g., human experience, personal connection).

“ Lack of in-person services, which makes it harder to build therapeutic relationships. (C2)

“ People are required to answer screening questions, which may trigger people with anxiety or chronic illnesses [and I] always feel terrible. Face-to-face is not allowed and misunderstandings are increased as to the needs to be met for some people. Some programs and resources are help for COVID-related topics only. (C2)

Although most respondents described the specific struggles they were facing, a few discussed positive outcomes, such as increased program availability, improved communication and additional COVID funding.

“ The silver lining of the pandemic is that some of the funding resources we were needing are now available to us to help deal with the pandemic. However, the bad side of this is that strict limitations on services have pared down our already inadequate mental health and addictions programming. ... But we can buy all the masks and bleach we could ever need (if they’re available). (C2)

Final Comments on Harm Reduction and Work Experiences

The final question of both surveys asked if there was anything else individuals wanted to share about their work and their experiences. About 28% ($n = 183$) of Cycle One respondents and 11% ($n = 146$) of Cycle Two respondents answered this question. The major themes included liking what they do and knowing harm reduction work is important.



“

I simply love my work ... I don't even think of it as work most days ... I think of it as my duty to my fellow person. The worst part is all the paperwork, the people aren't the work. It is a joy when I can find something that can alleviate some of that hardship and suffering. The frustration in this work comes from the ignorance of others and their treatment of PWUS [people who use substances]. People are dying because they avoid health care and other services. (C1)

”

“

I have the best workplaces and coworkers who really get what harm reduction is all about! (C2)

“

This job makes me feel full and meaningful. (C2)

Support was also a main theme in both cycles. Respondents indicated the need for employee-specific services and supports, harm reduction-specific resources, more government funding and support, and increased efforts to reduce stigma about harm reduction work, homelessness and addiction.

“

More training on how to provide harm reduction in a supportive manner. (C1)

“

The [jurisdiction name] government needs to be evaluated on their response to the opioid epidemic and their lack of acknowledgement or use of peer-reviewed research regarding harm reduction services. A government should not be allowed to see its most vulnerable populations as disposable. (C2)

“

Being a harm reduction worker right now is extremely emotionally demanding. We are losing a lot of people, and it feels like the rest of the world doesn't care or acknowledge this. It's like a war zone. (C2)

Several Cycle Two respondents mentioned COVID-related concerns, such as encouraging social distancing and proper disinfecting, as well as the desire for more online services and virtual care. Some also noted the importance of improving existing services for clients (e.g., better organized services, need for more shelters, more nutritious food offerings) and for harm reduction workers (e.g., better safety for staff and clients).

“

I would like to see virtual harm reduction incorporated [in]to my setting to help more clients. (C2)

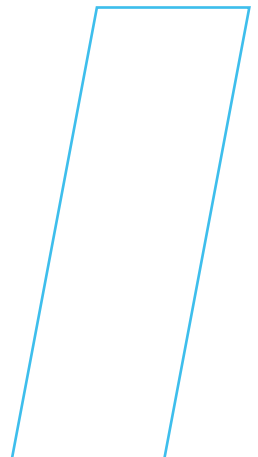
“

There are a lot of barriers when working with people who are homeless. I have tried doing alcohol and drug groups via Zoom, but this was not successful due to my participants not having a phone, Wi-Fi or computer. (C2)

“

I think overall it is not my specific workplace or my specific self-care practices that would support me best to do this work — it is systemic change in the way that we treat people living in poverty, racialized people, people with disabilities, women and trans people, and people who use drugs. If the system were better designed, I think a lot of the fatigue that people experience in harm reduction-based jobs could be mitigated. (C1)

”







Discussion

The initial purpose of our study was to quantify anecdotal reports of the toll experienced by harm reduction service providers in Canada as the overdose emergency worsened. We wanted to get a national picture of the experiences of frontline providers, who had not yet been considered on a national level. This included gaining a better understanding of available workplace services and supports that may help those providing this critical component of the care continuum. With the emergence of the COVID-19 pandemic, a second cycle of data was collected to examine the effects of this additional challenge, as well as identify compounding effects of the ongoing overdose emergency.

Both surveys were enhanced by the participation of representatives from harm reduction organizations across Canada. They validated themes and rationale, helped interpret the results and endorsed the implications of the findings. The input of these individuals is captured in the discussion below where consultation partners are referenced.

Service providers experienced moderately high levels of compassion satisfaction from their work across the survey cycles. Levels of burnout and secondary traumatic stress were concerning, higher than those established as benchmarks among professional caregivers who interact with survivors of trauma (De La Rosa et al., 2018), nurses working in multiple settings (Hunsaker et al., 2015; Ruiz-Fernández et al., 2020) and Italian hospital healthcare workers during the COVID-19 pandemic (Buselli et al., 2020) (see Table 6).

Potentially aggravating these experiences, participants in our study reported engaging in self-care activities only two to three days per week, less often than two to five days per week reported by hospice care professionals (Hotchkiss, 2018) and chaplains (Hotchkiss & Leshner, 2018). These comparisons indicate that those working in harm reduction are experiencing a pronounced strain on their emotional well-being. Indeed, vulnerability to grief reported in our study (Cycle One $M = 14.91$, $SD = 4.14$; Cycle Two $M = 17.16$, $SD = 3.74$) approached levels previously observed among bereaved individuals ($M = 22.15$, $SD = 4.38$) (Sim et al., 2014).

Table 6: Average Professional Quality of Life Subscale Scores in Various Studies, M (SD)

Subscale	Cycle 1	Cycle 2	Established benchmarks (De La Rosa et al., 2018)	Emergency department nurses (Hunsaker et al., 2015)	Hospital and primary healthcare nurses (Ruiz-Fernández et al., 2020)	Healthcare workers during COVID (Buselli et al., 2020)
Compassion satisfaction	36.7 (6.1)	35.5 (7.0)	37.7 (6.5)	39.7 (6.3)	35.48 (7.4)	38.2 (7.0)
Burnout	26.0 (4.7)	26.6 (5.5)	22.8 (5.4)	23.66 (5.9)	23.44 (5.3)	19.8 (5.0)
Secondary traumatic stress	25.6 (7.4)	28.7 (6.7)	16.7 (5.7)	21.57 (5.4)	20.74 (7.8)	18.0 (5.6)



Benefits and Challenges of Providing Harm Reduction Services

Our qualitative results indicated that participants found great meaning in their work, which may buffer against some of the stresses of the job. These findings are similar to recent research where individuals reported that harm reduction provision gave them a purpose (Greer et al., 2021; Pauly et al., 2021) and was supported by our consultation partners. While much of the conversation about harm reduction focuses on political and implementation challenges, partners emphasized the importance of recognizing the benefits of their work. They shared that people take on the work out of a commitment to their community, not for a salary, and that it is very rewarding.

While levels of burnout and secondary traumatic stress in our study were greater than those previously reported among other healthcare workers (Table 6), we anticipated that the levels might have been even higher given previous reports (Bigras et al., 2021; Kolla & Strike, 2019; Mamdani et al., 2021; Olding, Boyd et al., 2021) and including the added toll of the pandemic (Mauder et al., 2021). It is possible that individuals who were facing the highest levels of burnout and grief had already left this occupation or were taking time off to cope with the stress, as has been reported elsewhere (Olding, Barker et al., 2021). Most respondents to our study were relatively new to the practice and had been working in harm reduction for five years or less. It is also possible that people who were still in practice and were experiencing high levels of burnout and vulnerability to grief did not have the emotional capacity nor free time to respond to this survey, so they were not captured in these samples. Our consultation partners supported these explanations. Partners confirmed that turnover in harm reduction positions is very high, which is a significant risk to harm reduction provision, as trust decreases if staff changes frequently. This echoes previous research findings that trust is a critical factor to the success of harm reduction services (Frost et al., 2021; Noyes et al., 2021; Roxburgh et al., 2021). This turnover may occur because people working in harm reduction settings, such as overdose prevention and response sites, often have casual positions, with economic insecurity and job precarity. These structural vulnerability factors may explain how burnout is experienced (Olding, Barker et al., 2021).

Our study included a range of harm reduction services provided in many different settings, some of which may be more challenging than others. This variability was consciously included in the study design to reflect the importance of harm reduction being integrated along the continuum of care. However, it may be masking some of the effects unique to more demanding settings. Partners suggested that the moderate levels of burnout reported in our study may be because burnout had become normalized among those providing harm reduction services. Normalization of stress and burnout among harm reduction providers has been previously reported (Olding, Barker et al., 2021). Partners also indicated that stress is often coming from every angle (e.g., federal funding reductions, staffing challenges, daily exposure to trauma) and has been happening for so long that living with the feelings of being burned out was the accepted standard. That being said, partners also believed the findings underreported rates of stress and burnout. They suggested there may be a ceiling effect occurring, as the findings revealed that burnout did not significantly increase with the additional stressors of the pandemic. People working in harm reduction services may have already been at capacity listening to stories of trauma and witnessing harms to those who use substances, thus they had little space to react to the pandemic.

The moderate levels of vulnerability to grief reported were also surprising as it is not in line with previous studies (Mamdani et al., 2021). The scale in our study measured respondents' ability to cope with grief as opposed to the experience of grief itself. Thus, the moderate levels of grief reported in our study do not indicate that respondents are not surrounded by loss, but rather that they may have found ways to prevent it from weighing too heavily on them. Indeed, participants reported doing various self-care activities an average of two to three times a week. Qualitative responses spoke to the strength individuals gained from their peers. Yet, the interpretation of this finding is likely more nuanced. Our consultation partners indicated that moderate vulnerability to grief was probably a survival mechanism in response to such continuous loss. Individuals in this field are saturated with grief, and it feels impossible to add any more grief to what they are already carrying. Partners said it would be overwhelming if they were to stop and try to process the grief, so they “numb out,” develop a “suspension bridge” to avoid the “pit of grief” and keep going.



In a previous examination of harm reduction workers in Canada, participants reported using avoidance as a way to cope with their immense grief (Olding, Barker et al., 2021). Our qualitative results and consultation partners reflected the notion that harm reduction workers do not have the luxury of taking the time to process their grief. They are motivated to press on as critical work remains to be done. This has been posed as an example of grief avoidance in the literature (Olding, Barker, et al., 2021). Previous studies that captured the taxing impact of exposure to trauma and experiences of grief used in-person qualitative and ethnographic methods (e.g., Kennedy et al., 2019; Khorasheh et al., 2021; Kolla & Strike, 2019). It is possible that our online survey methodology was not sensitive enough to capture such a nuanced experience.

Services and Supports

Respondents were satisfied with supports they received from their coworkers and managers, but they also reported a need for more support. These contrasting findings may reflect the variability among participants in the study. Previous literature supported the need for on-site counselling, debriefing and bonding with colleagues to cope with the challenges of responding to overdose events (Bigras et al., 2021). Our consultation partners said they had also been using these activities with some initial success to keep individuals in their roles. Partners also shared that alternative staffing models are also being explored. For example, staff take different roles throughout the week that alter the levels of exposure to trauma. This allows individuals to have some time to process their grief. Yet, previous literature highlighted how some harm reduction workers may hesitate to report the emotional impacts of the job to their managers or supervisors, fearing that it may negatively affect their employment (Khorasheh et al., 2021). Different interventions should be evaluated to allow for knowledge translation among the different harm reduction contexts across Canada. This would also allow for the scale and spread of the most effective strategies.

The need to better support providers is well established. The urgency to do so is demonstrated by our study's findings. A failure to support the essential workforce translates to increased harms among the individuals they serve. The reciprocal nature of the well-being between client and provider has been recommended as a critical factor for improving outcomes in vulnerable populations and their providers. Staff who are less stressed are better able to serve their clients; and when the mental health needs of their clients are appropriately addressed, staff feel less stress. (Bobbette et al., 2020). When client and provider well-being is not adequately addressed, it can cascade to take a toll on the healthcare system (Bobbette et al., 2020). Thus, effectively responding to mental health needs may lead to improved outcomes, not only for an individual and the clients they serve but on system capacity and healthcare costs as well.

During the pandemic, strategies that helped alleviate the stress of direct support professionals who were deemed essential providers included monetary compensation, employer recognition, opportunities for team and peer support, ability to take vacation or leaves of absence, and enhanced access to mental and physical health services (Bobbette et al., 2020). Systematic reviews have shown promising strategies to address stress, burnout and well-being among healthcare providers. These strategies include cognitive behaviour interventions (Clough et al., 2017), yoga programs (Cocchiara et al., 2019; Cocker & Joss, 2016; Zhang et al., 2021), mindfulness programs (Cocker & Joss, 2016; Kriakous et al., 2020; Naehrig et al., 2021), music- and art-based interventions (Phillips & Becker, 2019) and resilience building programs (Cocker & Joss, 2016; Kunzler et al., 2020).

Yet, harm reduction workers need access to these supports to be able to benefit from them. Our qualitative results, previous literature (Khorasheh et al., 2021) and input from consultation partners show that even when supports are available, they are often not adequate. That could be because only an insufficient number of sessions are covered through benefits. Or it could be because services in employee assistance programs do not have the trauma- and grief-lens needed to respond to the complex experiences of harm reduction workers.



Benefits to physical and mental health can also be observed when interventions target an organizational- or system-level approach (Brand et al., 2017; Bronkhorst et al., 2014). Solutions presented in a whole-systems approach include supports for local staff needs, staff engagement at all levels, strong and visible leadership, health and well-being supports at the senior management and board levels, and management capability and capacity to improve staff health and well-being (Brand et al., 2017). Similar recommendations have been made for workplaces in Canada to support mental health, including:

- Creating a comprehensive, organization-wide mental health strategy that prevents harm, manages illness and promotes positive outcomes;
- Establishing mandatory mental health training for managers and leaders about the concept and need for workplace mental health;
- Developing tailored mental health supports based on needs assessments that identify unique components of employees, work setting and context;
- Prioritizing a supportive and understanding return-to-work process; and
- Assessing outcomes and committing to continual improvement (Centre for Addiction and Mental Health, 2020).

National standards of psychological health and safety in the workplace have also been developed for Canada. The standards include guidelines, tools and resources for prevention, promotion and implementation guidance for organizations (Canadian Standards Association, 2013). Some of our study respondents were using substances, so organizations may consider workplace substance use policies that support psychological health and safety principles in regard to substance use health as well (Community Addictions Peer Support Association, 2021).

Furthermore, our qualitative findings highlight that the healthcare system itself is a barrier to providing quality care. Respondents indicated that the lack of community services to refer individuals to is a challenge. Moreover, they reported that their own professional quality of life was affected more by the failures of policies and systems than it was by their own jobs. These findings speak to the need for system-wide change that would better support those who use substances and, in turn, harm reduction workers, as has been previously reported (Bigras et al., 2021; Health Canada, 2019a; Kennedy et al., 2019;

Kolla & Strike, 2019; Kolla & Strike 2021; Mamdani et al., 2021). These changes could address the discrepancies between the public and private systems, and between regulated and unregulated workers, which are seen more often in mental health and substance use care than other health arenas. Governments could implement the following solutions to support healthcare providers:

- Increased public funding and system capacity for evidence-informed psychotherapy;
- Legislation and prescriptive measures to ensure workplace mental health;
- Motivators such as tax incentives or subsidies for employers that implement quality mental health tactics; and
- Regulations to influence health and disability insurance providers to ensure workplace mental health (Centre for Addiction and Mental Health, 2020).

Implementing these strategies could improve access to care, healthcare provider well-being and integration of care. All of these have been highlighted internationally and nationally as priorities for action. It could also increase the prospects for a healthy and capable workforce to support the post-pandemic recovery of people living in Canada.

Impacts of the COVID-19 Pandemic and the Overdose Emergency

In general, respondents reported similar levels of compassion satisfaction, burnout and self-care in 2019 and 2021. The replication of findings between the two survey cycles indicates good reliability that the experiences of harm reduction providers were captured accurately. Indeed, our consultation partners agreed that the data provides an accurate picture of their experiences, and they were not surprised that the results were similar between the two survey cycles. Partners indicated there were likely no major changes over time because the experiences of providing harm reduction services were already so challenging and rewarding that there was little room for change. As well, they considered themselves an essential service, so they continued as usual throughout the pandemic. As burnout and compassion satisfaction each relate to the experiences of performing one's job (which participants indicated they largely continued as normal), these domains may have been less likely to change over time. In contrast, secondary traumatic stress and vulnerability to grief, which increased in Cycle Two, reflect the emotional connection one has to another individual. These increases are not surprising given



the ongoing and escalating overdose emergency, coupled with the additional stress of the pandemic. Respondents reported becoming more sensitive to the well-being of their clients, which has been reported as a reaction to the pandemic elsewhere (Frost et al., 2021; Noyes et al., 2021).

And yet, the COVID-19 pandemic may have had an unintended benefit for those working in harm reduction. Respondents reported significantly less stigma in 2021 than in 2019. It is possible that the physical distancing and stay-at-home orders exacted by the pandemic may have reduced the interactions respondents had with others, providing fewer opportunities for stigma to occur. The reduction of stigmatizing could also, in part, be the result of advocacy and education that has been taking place to improve people's understanding of substance use. Indeed, awareness initiatives have been shown to have positive impacts on reducing stigma at the individual and organizational levels across Canada (Canadian Centre on Substance Use and Addiction, 2020b).

Our consultation partners were surprised that experiences of stigma were lower in 2021. They felt it was still pervasive in their communities, a theme that is strongly represented in our qualitative findings. Stigma is a significant barrier to implementing harm reduction as it is often viewed as encouraging substance use, a finding observed in recent literature (Bigras et al., 2021). Partners suggested the reports of decreased stigma in 2021 may have been due to stigma becoming more subtle and more difficult to discern. When supporting individuals who use drugs to access health care, partners observed changes in the way healthcare staff responded to the patient once the provider learned about the client's substance use. While not overt, partners shared that healthcare providers may make small stigmatizing comments, may change their tone of voice or may switch from having discussions to being more direct. This suggests that healthcare providers are learning to be more restrained in their interactions with people who use drugs and those providing harm reduction services, but stigma persists under the veil of political correctness. People who use drugs experience stigma when they use hospital services for opioid toxicity (Khorasheh et al., 2021) and when interacting with healthcare providers (Madden et al., 2021). Further education and anti-stigma initiatives are needed for healthcare providers in the broader system of care.

Qualitative responses also revealed positive impacts of the COVID-19 pandemic. Some respondents indicated that the pandemic increased the meaning they experienced in their job as they were able to be a reliable source of support to their clients during a period of turbulence. This was supported by previous findings

related to harm reduction provision during COVID-19 (Parkes et al., 2021). Others reported that the tumultuous time increased their communities' acceptance of harm reduction services and made them more willing to support others than they had been before the pandemic. Personal benefits were also reported with individuals realizing how resilient they could be and their own ability to develop new coping skills during challenging times. These findings suggest that while the pandemic was one of the greatest threats to global well-being, it may also have presented opportunities for post-traumatic growth, where individuals reassess things with positive adaptations following hardships (Tamoliaki & Kalaitzaki, 2020). Initial assessments of frontline nurses in China revealed post-traumatic growth occurring during the pandemic (Chen et al., 2021; Cui et al., 2021). As we move toward post-pandemic recovery and implementing solutions to the overdose emergency, mechanisms to foster post-traumatic growth may benefit those working in harm reduction and the community at large.

Impact of Gender Identity

Previous literature found that being a man was protective against the negative impacts of treating opioid use disorder during the COVID-19 pandemic (Blevins et al., 2021) and the traumatic stress of providing healthcare services during the pandemic (Buselli et al., 2020). In contrast, our results revealed that individuals identifying as men reported greater experiences of burnout, secondary traumatic stress and vulnerability to grief. Yet, men with lived or living experience reported greater levels of compassion satisfaction. This latter finding may be reflective of men's gender identity providing the emotional benefits cited above. However, women were more likely to report job satisfaction.

Although little literature could be found on gender differences among those providing harm reduction services, our consultation partners suggested that women are often responsible for multiple other personal matters, such as childcare or simply their personal safety. Women may not have had the time nor space to reflect on the impact of professional burnout, secondary traumatic stress and grief as much as men. The pandemic-related toll placed particularly on women has been cited elsewhere as interfering with their ability to work and increasing their home responsibilities, such as childcare and schooling (DesRoches et al., 2021; Government of Canada, 2020). These differences may explain why the proportion of women who completed the Cycle Two survey was greatly reduced. It underscores the need for services to take a gendered lens to adequately respond to the needs of harm reduction service providers.



Impact of Regulatory Status

Our results show great variation in the occupations and professional associations of the participants. Previous research has shown that many individuals working in harm reduction are often filling a gap not provided by the healthcare system, and they are more likely to have lived experience, be volunteers or both (Dechman, 2015; Olding, Barker et al., 2021; Health Canada, 2019b). In our study, regulated professionals experienced greater satisfaction with their work, while unregulated professionals experienced greater burnout and vulnerability to grief. This difference might be because individuals working in settings such as overdose prevention sites, supervised consumption sites and community outreach teams may have fewer formal supports, such as employee assistance programs or benefits that provide coverage for counselling or other self-care measures. Khorasheh et al. (2021) has previously reported on the lack of benefits as a gap for harm reduction providers. Our consultation partners confirmed that those who were employed in harm reduction through health authorities were on a different pay scale than those employed by community organizations. They also shared that unregulated workers in settings such as overdose prevention sites often do not have access to support services. A previous Canadian study revealed that people with lived experience (who are often in unregulated professions) may work at the same organization and perform the same duties as others who are unionized, and yet receive half the compensation (Olding, Barker et al., 2021). Harm reduction providers have called for adequate pay, benefits, vacation and sick leave for those working in part-time or contract positions as a way to cope with job challenges (Khorasheh et al., 2021).

These effects seemed to be particularly pronounced among men, with those in unregulated professions experiencing greater secondary traumatic stress and stigma than men in regulated professions. It may be that men get more benefit from the supports obtained in a regulated profession than women, a possibility that requires more research to fully understand.

Impact of Lived or Living Experience with Substance Use

Individuals with lived or living experience were more likely to experience secondary traumatic stress and vulnerability to grief than were those who did not have lived experience. Women experienced greater levels of burnout if they had lived or living experience, compared with women without such experiences. However, the groups did not differ in their compassion (job) satisfaction or their experiences of stigma.

These findings suggest that individuals with lived or living experience may be more intimately connected to this work. Our consultation partners suggested that individuals with lived or living experience are more closely connected to the overdose emergency. They are often part of the same communities they are helping. There is no “going home at night” to decompress. This notion has been supported in the literature where those providing harm reduction services struggled to establish boundaries between their professional and personal lives (Olding, Barker et al., 2021). In contrast, those who do not have lived or living experience with substance use may be able to detach from the concerns at some point, which may lessen the impact of providing harm reduction services on their well-being.

Those with lived or living experience and those in unregulated professions, as well as the services they provide must be valued in a manner that formally recognizes their legitimacy and expertise in the labour market (Greer et al., 2021). Many individuals took on harm reduction as a necessity to help people in their communities. There is evidence that the responsibility to respond to overdoses has shifted from professional first responders to those with experiential expertise, yet this labour needs to be equitably recognized (Olding, Boyd et al., 2021). By keeping unregulated employees (often those with lived or living experience) in casual, temporary jobs with no union, organizational support nor opportunities for occupational growth, power imbalances are worsening (Olding, Barker et al., 2021). Moreover, the acknowledgement and appreciation for the services provided must be fair (Greer et al., 2021) to avoid individuals with lived or living experience in casual positions becoming marginalized from those with lived or living experience who are in more secure roles funded by a health authority and receiving greater remuneration (Olding, Barker et al., 2021).



Limitations

As in all research, there are limitations to the current study. There was significant diversity among the study's respondents, as harm reduction can take many forms. The experiences of volunteers at a supervised consumption site could be significantly different from physicians providing opioid agonist treatment. The diversity of these roles may mask some of the effects that a subpopulation may have experienced and limits the generalizability of the findings. Moreover, we were unable to collect data from individuals who had previously provided harm reduction services and left the practice. These individuals may have been most affected, but their data could not be captured in this study.

While questions focused on the overdose emergency, harm reduction services are not restricted to opioids. The experiences reported by respondents cannot be attributed to opioid-related harms alone. Also, none of the measures in our study had been validated among individuals providing harm reduction services. The measures were shared with our consultation partners during the study design phase, and they supported their use in the study, yet it remains possible that the scales may not have been able to capture the nuances of such complex work. Additionally, we did not quantify individuals' experiences of trauma nor the amount of trauma they had been exposed to. Similarly, the variables measured may have interacted with one another to impact individuals' well-being. Examination of the interplay between factors was beyond the scope of our study. For the qualitative components, there is always some degree of researcher subjectivity that is incorporated into the analyses, so we must acknowledge the potential for unintentional bias.

The nature of the overdose emergency and political responses are constantly evolving, which could have impacted the results. For example, during Cycle One, some data showed decreases in opioid toxicity deaths in Alberta (Alberta Health, 2019). At the same time, a review of supervised consumption sites assessed "concerns about [their] impacts on homes, business and communities" (Government of Alberta, 2019). Changes like these may have influenced how individuals replied to the survey's questions, so their responses might have differed if they had completed the survey earlier or later in the data collection period. To minimize this risk, data were collected over a relatively short period.

Additionally, the distribution of participants from across Canada was not equal. While every effort was made to engage networks from all jurisdictions, a large portion of the sample was from Ontario, Alberta, British Columbia

and Manitoba in Cycle One, and from Ontario, Alberta, British Columbia, Manitoba and Quebec in Cycle Two. Similarly, Cycle One had more women than men respond, but Cycle Two had a more equal distribution of gender. These differences have implications for the generalizability of the findings.

Finally, individuals who did not have internet access may not have been able to access the survey. Our consultation partners assured us that most providers would have access to the internet, either through personal or employment means or through sharing cell phones. However, we acknowledge that this method excluded some individuals who provide harm reduction services from the survey.

Future Research Directions

Our results revealed the interplay between multiple factors including gender, regulatory status and lived or living experience with substance use on multiple outcome variables. While data were collected on multiple gender identity categories, sample sizes were too small to examine differences beyond those who identified as men or women. Recruiting individuals with diverse gender identities for future studies could provide a better understanding of the implications this demographic may have on professional quality of life during public health threats. Further research should continue to explore the impact of the intersection of gender, parity and lived experience, as well as other relevant variables, on well-being and the experiences of those providing harm reduction services. This could allow for the development of targeted supports or policies that may be most helpful for the diverse individuals working in harm reduction.

Subsequent analyses may also focus on evaluating the implementation of trauma-, loss- and gender-informed counselling to ensure it is improving the well-being of those providing harm reduction services. Respondents indicated that more supports were necessary, but evaluations should be undertaken to ensure benefits are obtained and negative unintended consequences are not experienced.

As hypothesized in the Discussion section, individuals who are most affected by the emotional toll of providing harm reduction services may no longer be working in this area and were not represented in this survey. Future research should examine the well-being of those who have left the field. A better understanding of the long-term impact of providing services that are highly rewarding and highly challenging could inform competency, training and other support initiatives.





Conclusions

Previous research has highlighted a complex relationship between the pandemic, mental health and substance use leading to long-term negative outcomes for many individuals. The World Health Organization recognized mental health as a key element to be addressed in COVID-19 responses (2020). Our study provides an important overview of the challenges and benefits of providing harm reduction services, as well as the impact of the opioid emergency and the pandemic on the well-being of service providers.

The study's findings and our consultations point to five strategies to improve the experiences and well-being of those providing harm reduction services.

- A comprehensive healthcare system that integrates harm reduction services more closely with physical, psychological and social support services would improve access to the services needed by those using substances and those providing harm reduction services.
- Sustainable and reliable federal, provincial and territorial funding for harm reduction would not only allow the continuity of services but would also remove financial and planning stressors for program directors and staff.
- Specialized gender-, trauma- and grief-informed counselling resources would help prevent further harm to those providing harm reduction services and ensure that the investment in these resources has meaningful outcomes. Employers providing a sufficient number of sessions, amount of financial compensation or both would ensure a benefit is received and sustained.
- Examination and evaluation of equitable staffing models and policies (e.g., mandatory mental health training for leaders, organization-wide mental health policies) would improve the well-being of those providing harm reduction services. Evaluation of these models and policies could lead to the removal of structural vulnerabilities to burnout, such as job precarity and economic insecurity (i.e., leading to adequate pay, benefits, vacation and sick leave for workers regardless of regulatory status or employment by community or government agencies).
- Bolstering anti-stigma initiatives among the public and healthcare providers in the broader system would increase willingness to seek and offer help, facilitating positive outcomes.

Support of the essential mental health and substance use workforce, specifically those providing harm reduction services, is critical to ensuring the health and well-being of the individuals they serve and the broader healthcare system. The challenges outlined by survey respondents must be addressed as post-pandemic recovery will require a full complement of services and supports to respond to mental health and substance use concerns. None of the above initiatives should be undertaken without the meaningful engagement of people who use substances and those providing harm reduction services to support the principles of “nothing about us without us” (Canadian HIV/AIDS Legal Network, 2006; Noyes et al., 2021). Harm reduction is often the first encounter individuals have with supportive services for substance use harms. Supporting this workforce, no matter where they work in the system, will be critical to ensuring quality care is available to people using substances.





A Call to Action: Solutions to Address Drug Toxicity Harms and the Overdose Emergency

What began as an emergency of pronounced opioid harms, now includes the toxicity of multiple substances and related overdose emergency throughout North America. With the staggering overdose numbers and tragic loss of human life, the impact continues to grow. In the United States, recent studies indicate that 20% of all deaths of young adults between 24 and 35 years old are related to opioid use. Since 2001, overall deaths related to opioid use have increased by almost 300% (Gomes et al, 2018). In Canada, based on reports by the Government of Canada and the British Columbia Coroner's Service, there were 4,460 reported opioid-related deaths in 2019 (Krausz et al., 2020). Moreover, more than 90% of these deaths were considered unintentional (George et al., 2022). This is a shocking and sad reminder that these deaths were avoidable. These numbers and the human suffering behind them are alarming, and they call on the federal, provincial, territorial and municipal governments to continue elevating their effort and action toward finding and implementing solutions to this ongoing emergency.

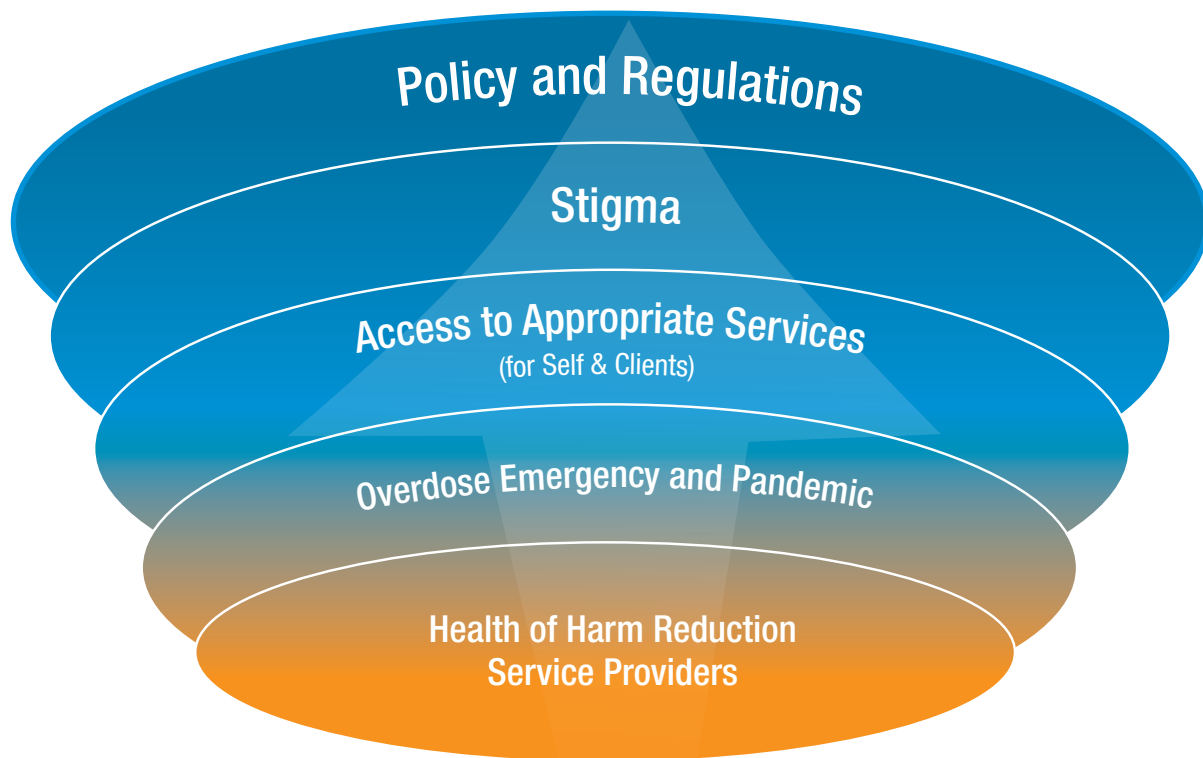
What is equally alarming for Canada is that these numbers are continuing to climb, particularly during the COVID-19 pandemic. Indeed, there were 7,224 apparent opioid toxicity deaths during the first year of the pandemic, a 95% increase over the previous year (Special Advisory Committee on the Epidemic of Opioid Overdoses, 2022). While Western Canada has seen a higher percentage of the overall Canadian drug toxicity deaths, these numbers, trends and their associated human toll are being observed across the entire country. Suicidal behaviours have also increased during the COVID-19 pandemic, compared with prepandemic levels (Dubé et al., 2021). Some have warned that increases in apparent suicides may be partly related to increasing opioid-related overdose deaths (Olfson et al., 2019). All sectors across Canada, including housing, justice and social services, are being challenged as we struggle to manage the dual public health emergencies of overdoses from a toxic drug supply and the COVID-19 pandemic. It is also challenging to navigate through the unprecedented political, clinical, scientific, ethical and moral challenges faced by people who use drugs, care providers, health professionals and institutions in the process.

These public health emergencies have worsened concerns about the health of healthcare professionals, who are critical to the capacity and success of healthcare systems (Brand et al., 2017; Canadian Medical Association, 2018; World Health Organization, 2021). This is particularly concerning for people working in mental health and substance use care. This workforce has often been overlooked in terms of integrating their practice into the public healthcare system and their personal well-being (Canadian Health Workforce Network & Mental Health Commission of Canada, 2021). An important and key group to consider in all this, in addition to people who use drugs, are the harm reduction service providers. They see the gaps in Canada's healthcare systems and harm reduction services and the effect these gaps are having on their clients' and their own health and well-being. We owe a great deal of gratitude to these dedicated service providers, who are often underrepresented in the national conversation about the overdose emergency or the health of healthcare professionals.

The enormity of these challenges seems to have limited efforts to reverse the escalating overdose emergency. The inability to make significant headway in managing and ultimately solving this crisis is multifaceted and reflects the complexity of the factors underlying the current state of drug toxicity harms. Together, the overdose emergency and the COVID-19 pandemic have highlighted the disparities Canada faces at economic, healthcare and social levels. While there are varied views about the best way forward, a clear sense of common purpose has yet to be achieved, though it is broadly recognized that an all-government and whole-of-society response is needed.

This report highlights the experiences of harm reduction workers in Canada, including those with lived or living experience with substance use, as they deal with this dual public health emergency. The findings outline the variables affecting the health of harm reduction service providers daily, such as mounting overdose deaths among their clients. The results also strongly speak to the surrounding political and social factors, such as access to services, stigma and policy (see Figure 8).

Figure 8. Factors Influencing the Health of Harm Reduction Service Providers



The effects of the overdose emergency and the COVID-19 pandemic on the health of harm reduction service providers are well-addressed in the findings in this report. This Call to Action provides a path forward for supporting the health of harm reduction service providers by building connections between the knowledge we have gained in this study about needs and gaps and the knowledge accumulated from the scientific literature. Based on these connections, the following themes speak to actions needed in the broader system to improve the health of harm reduction service providers.

Theme 1: Access to Services

Complexity of the Mental Health and Drug Use Context

The pathways to opioid use and toxicity-related harms, hospitalizations and deaths are complex, as are the mental health and drug use realities of those with lived and living experience with substance use. The increased number of people experiencing challenges with mental health and substance use during the COVID-19 pandemic highlight polydrug use and concurrent mental health

disorders as a big part of this complexity. Studies have shown that people living with mental illness are twice as likely as other people living in Canada to experience problematic substance use, including problematic opioid use (George et al., 2022). People being treated within the addiction system — whether through substitution programs or bed-based treatment — are frequently depressed, anxious, traumatized, suffering from other mental health or physical health issues (e.g., chronic pain), or any combination of these (George et al., 2022). It is clear from societal, scientific and clinical perspectives, approaches must move away from a single-substance and single-disorder focus. We need an approach built on an understanding of the role of social determinants of health, the use of multiple substances and their interaction with co-occurring mental illness and physical health issues. Successfully addressing the challenges posed by the overdose emergency requires a translational, integrated approach across settings (including healthcare, justice, education and social service systems; Blanco et al. 2020) that combines the contributions of neuroscience, pharmacology, epidemiology, psychology, treatment services, harm reduction and prevention.



Changing the approach to addressing substance harms may also improve the well-being of service providers supporting people who use substances. The findings from this report have revealed that individuals providing harm reduction services are overburdened and highly stressed at levels beyond those observed in other healthcare professionals. This workforce needs to be supported by all levels of government to have the strategies necessary to deal with the complex nature of their clients. Such strategies include:

- Ensuring that harm reduction workers have seamless and timely access for client referral to other professionals, treatments and supports, which speaks to the complexity of their clients' challenges and enables coordinated care.
- Ensuring that those providing harm reduction services have sufficient access to appropriate counselling and support services that reflect the complexities of their daily experiences.
- Evaluating equitable staffing models and policies, as well as addressing structural vulnerabilities to burnout, such as job precarity and economic insecurity.
- Funding research examining the interplay among polysubstance use, mental health, physical health, and opioid use and overdose.
- Developing and evaluating novel and effective intervention strategies that address this complexity in a variety of settings, to help more effective supports cascade to improve the well-being of those providing harm reduction services.

Access to the Full Range of Effective Medical and Nonmedical Tools to Address the Overdose Emergency

Building on the above complexity, the continuum of care and overall coordination between services must be improved to reduce the burden placed on harm reduction service providers. As would be expected for healthcare providers generally, harm reduction workers should have timely access to the full range of effective medical and nonmedical treatments and interventions for use with their clients. While physicians have recently gained access to a somewhat broader array of pharmacological tools needed to treat opioid use disorder and opioid-related harms, gaps continue. These gaps include access to training

and support for prescribing opioid agonist therapies (OAT; e.g., methadone and buprenorphine/naloxone) and other addiction medications (e.g., naltrexone).

Clients also face geographical barriers to treatment. These include the availability and accessibility of heroin-assisted treatment, injectable opioid agonist therapies (iOAT) and other pharmacological options, like naltrexone, the injectable opioid blocker. The implementation of rapid access addiction medicine clinics has been shown to be effective in bridging some of these gaps (Corace et al., 2020). Yet, effective psychosocial treatments are not readily available across communities (Corace et al., 2019; George et al., 2022).

Together, these realities highlight the need for harm reduction workers to be more fully supported by other health professionals. This can be achieved by ensuring access to the full range of validated medical and psychosocial interventions needed to optimally support those experiencing drug toxicity and asking for more interventions and support.

Integration of Medical and Nonmedical Interventions to Support the Health and Well-being of Those at Risk of Overdose

While timely access to the full range of health-related interventions is necessary, these interventions must also be provided in an integrated and coordinated way. The integration of medical and nonmedical interventions is a big part of the success of countries where the opioid emergency has been averted or successfully managed (Krausz et al., 2020). The integration of pharmacological and psychosocial interventions is particularly important (Corace et al., 2019; George et al., 2022). There is high-quality evidence for the success of such interventions in the treatment of opioid use disorder (Izadi et al., 2021), which could ultimately be a critical tool to better support the work of harm reduction service providers.

The integration challenge extends beyond combining treatments and supports, and includes communication between the substance use and mental health sectors. Service providers supporting people living with mental health and substance use concerns work across multiple programs and sectors. Many of them operate under different funding streams (creating issues of wage parity, which are discussed further below), regulations and reporting mechanisms. These independent funding and administrative streams present a challenge for sharing information, which can create inconsistencies and slow the progress of responding to the overdose emergency. Within the general healthcare ecosystem, individual organizations work largely independently

with minimal coordination and integration (e.g., a lack of uniform data sharing platforms). To this end, the system of care in Canada needs to address the challenges of services, and support the coordination and integration of mental health, chronic pain, physical health and substance use in policies and frameworks.

Technology and System Capacity

To address the enormous individual-level needs of the overdose emergency and to further support harm reduction workers, the capacity of our health system requires new thinking and innovative ways of applying new and emerging technologies. Technology has played a transformative role in meeting the capacity challenges in other areas of health and health care, particularly during the COVID-19 pandemic. For example, virtual treatment and assessment, as well as hybrid models that combine technology with person-to-person care, can be effective for some and efficient for many, reaching more people who need help. Moreover, emerging research suggests that clients and service providers can develop meaningful rapport when meeting through virtual means (Canadian Centre on Substance Use and Addiction, 2021).

To this end, we encourage efforts to look at different models of care that address system capacity and to better leverage the power of technology to increase the capacity of our healthcare system to support harm reduction workers. Increased capacity would ultimately better support those at risk for overdose and those struggling with opioid-related challenges. In some cases, this will require infrastructure for technology to be available, and training for harm reduction service providers and their clients on how to use these technologies within hybrid models of care delivery.

Theme 2: Stigma

Experience of stigma was a theme throughout this study and continues to be a major issue. The repeated calls for decriminalization of substance use are rooted in the stigma experienced by those who use certain substances compared with those who use other substances (e.g., more stigma for opioid use than alcohol use). This stigma extends to those working in harm reduction services. It is an additional burden for harm reduction workers that very likely contributes to the adversity and high stress levels shown in this report.

As an expression of this stigma, the harms associated with opioid use are too often examined through a criminal justice lens rather than a health lens (Johnstone et al., in press). There is a broad range of perspectives about the extent to which our justice system should be linked to substance use generally and opioid use specifically. However, the one overarching theme that creates a common purpose is that the driving force must be to support the well-being and health of those experiencing opioid-related harms, and their harm reduction service providers and caregivers.

Theme 3: Policies and Regulations

Funding and Supporting Harm Reduction Service Providers

It is clear from the results of this report that harm reduction service providers are under enormous stress, which is not surprising. It is also clear from the survey results that harm reduction services are underfunded, and service providers are often underpaid. This is striking given the dedication and resilience that these individuals continue to demonstrate in the face of daily trauma. These providers often witness harms, such as drug use recurrence, overdose hospitalizations and overdose-related deaths of clients — people they have been helping and with whom they have developed bonds. Despite the personal challenges of working in this environment, it is common for those providing harm reduction services to volunteer their time to fill staffing gaps and cover unmet needs. Given these realities, it is also not surprising that burnout levels among harm reduction workers were found to be higher than those observed among emergency workers in previous research (see Table 6).

The enormity of the opioid-related harms that our country has experienced combined with the workplace challenges experienced by harm reduction workers creates an urgent and loud call to respond to the issues raised in the report. This adds to the calls to address the health of healthcare professionals more broadly. Consequently, it is critical that federal, provincial and territorial governments create strategies to provide and increase sustainable funding for these services as well as to address wage inequities among harm reduction workers and services in the community. The community organizations that employ harm reduction service providers are often not included in the parity framework or national discussions about health professionals more broadly. Clearly they should be.



Better Understanding the Issue: The Need for a National Database

Understanding the severity of the crisis and all the contributing factors requires understanding the available data. Having different sources of data that are not aligned creates an inconsistency in the numbers associated with this crisis. For example, provinces and territories use different methods to track opioid-related deaths and emergencies. This variability creates uncertainty about the precise extent of the problem and makes it challenging to understand the exact nature of regional differences, which is critical for a country as large as Canada. Importantly, Health Canada and the Public Health Agency of Canada compile and release quarterly updates on opioid- and stimulant-related harms in Canada (Special Advisory Committee on the Epidemic of Opioid Overdoses, 2021). However, due to the significant variability in what data is collected and how it is collected, it is challenging to compare across datasets and regions to obtain more nuanced information that would be important for decision making.

There is a need to further develop a more accurate and uniform method of tracking national drug toxicity-related deaths and related events across provinces and territories to reduce the gaps in evidence. As Canada has witnessed with COVID-19, national, provincial and territorial datasets with consistent data collection standards are invaluable to more fully understand the nature of this national emergency. This information is key to helping stakeholders fully appreciate and understand the stress placed on healthcare professionals.

To this end, there is a need to build on the existing Public Health Agency of Canada database and to develop and implement a national database of overdose and toxicity-related harms that collects standardized data to ensure consistent, uniform information from across Canada. It would also be invaluable to have up-to-date pan-Canadian data on the costs of a system where access and integration remain challenges and where the health of healthcare professionals may risk undermining quality service delivery. For example, the [Canadian Substance Use Costs and Harms](#) project provides the economic, health and social costs of substance use, but it could be enhanced by capturing the costs of all healthcare providers and more recent data to help prioritize targeted public policies.

Conclusions

Canada is in a serious and escalating overdose emergency that, combined with the COVID-19 pandemic, is taking a toll on our ability to provide good healthcare. We need to better support people who use drugs who are at the highest risk of fatal overdose and the harm reduction service providers who care for them. Based on our review of the literature and the survey results presented in this latest Substance Use in Canada report, we believe there are major opportunities for action across the country by using innovative and integrated coordinated care approaches that are based on consistent and more accurate information. These actions would accelerate solutions to the overdose emergency. This is a call to action for multiple responses from different levels to improve the system and thereby substantially improve the lives of those experiencing drug toxicity harms, and the health and well-being of harm reduction workers who provide such dedicated and professional care.

Franco J. Vaccarino, PhD, FCAHS

Sherry H. Stewart, PhD, FCAHS, FRSC

Tony P. George, MD, FRCPC

References

- Ahamad, K., Bach, P., Brar, R., Chow, N., Coll, N., Compton, M., ... Yau, S. (2020). *Risk mitigation in the context of dual public health emergencies: Interim clinical guidance*. British Columbia Centre on Substance Use. <https://www.bccsu.ca/wp-content/uploads/2020/05/Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies-v1.6.pdf>
- Alberta Community Council on HIV. (2019). *A community-based report on Alberta's SCS effectiveness*. <https://static1.squarespace.com/static/5e78e384490bc501575f352c/t/5f2c3056cc167915d809755b/1596731482796/A+Community-Base+Report+on+Alberta%E2%80%99s+SCS+Effectiveness+%282019-09-13%29+-+Version+2.pdf>
- Alberta Health. (2019). *Alberta opioid response surveillance report: 2019 Q1*. <https://open.alberta.ca/dataset/f4b74c38-88cb-41ed-aa6f-32db93c7c391/resource/0cbd25b5-12c8-411a-b8ff-e9e5900a11e6/download/alberta-opioid-response-surveillance-report-2019-q1.pdf>
- Alberta Health Services. (2019). Harm reduction: Spectrum of substance use. <https://www.albertahealthservices.ca/assets/info/hrs/if-hrs-spectrum-of-substance-use.pdf>
- Alkema, K., Linton, J. M., & Davies, R. (2008). A study of the relationship between self-care, compassion satisfaction, compassion fatigue, and burnout among hospice professionals. *Journal of Social Work in End-of-Life and Palliative Care*, 4(2), 101–119. <https://doi.org/10.1080/15524250802353934>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, D. C.: American Psychiatric Publishing.
- Association of Faculties of Medicine of Canada. (2018). *Update report on the AFMC response to the Canadian opioid crisis*. https://afmc.ca/sites/default/files/pdf/2018_AFMC_Response_to_OPIOID_Crisis_EN.pdf
- B.C. Centre for Disease Control. (2018). *Harm reduction [position statement]*. http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/BCCDC_HarmReduction_PositionStatement.pdf
- B.C. Centre for Disease Control. (2021). *Dual public health emergencies: Overdose in BC during COVID-19*. http://www.bccdc.ca/resource-gallery/Documents/Statistics%20and%20Research/Statistics%20and%20Reports/Overdose/2021.04.16_Infographic_OD%20Dashboard.pdf
- Bigras, J., Seisan, S. S., & Di Pietro, N. (2021). A qualitative analysis of the impact of the opioid crisis on non-emergency frontline social services workers. *Journal of Social Work Practice in the Addictions*, 21(3), 273–288. <https://doi.org/10.1080/1533256X.2021.1933851>
- Blevins, D., Henry, B. F., Sung, M., Edelman, E. J., Black, A. C., Dawes, M. ... & Levin, F. R. (2021). Well-being of health care professionals treating opioid use disorder during the COVID-19 pandemic: Results from a national survey. *Psychiatric Services*. <https://doi.org/10.1176/appi.ps.202100080>
- Bobbette, N., Hamdani, Y., Thomson, K., Abou-Chacra, M., Volpe, T., & Lunskey, Y. (2020). *Recognizing the mental health needs of an essential workforce: Being a direct support professional in the time of COVID-19*. Toronto, Ont.: Centre for Addiction and Mental Health. <https://www.camh.ca/-/media/files/azrielireport-dsp-covid19-pdf.pdf>
- Brand, S. L., Thompson Coon, J., Fleming, L. E., Carroll, L., Bethel, A., & Wyatt, K. (2017). Whole-system approach to improving the health and wellbeing of healthcare workers: A systematic review. *PLoS One*, 12(12), Article e0188418. <https://doi.org/10.1371/journal.pone.0188418>
- Bronkhorst, B., Tummers, L., Steijn, B., & Vijverberg, D. (2015). Organizational climate and employee mental health outcomes: A systematic review of studies in health care organizations. *Health Care Management Review*, 40(3), 254–271. <https://doi.org/10.1097/HMR.000000000000026>
- Buselli, R., Corsi, M., Baldanzi, S., Chiumiento, M., Del Lupo, E., Dell'Oste, V., ... Carmassi, C. (2020). Professional quality of life and mental health outcomes among health care workers exposed to Sars-Cov-2 (Covid 19). *International Journal of Environmental Research and Public Health*, 17(17), Article 6180. <https://doi.org/10.3390/ijerph17176180>



- Canadian Centre on Substance Use and Addiction. (2020a). *Impacts of the COVID-19 pandemic on people who use substances: What we heard*. <https://www.ccsa.ca/sites/default/files/2020-07/CCSA-COVID-19-Impacts-on-People-Who-Use-Substances-Report-2020-en.pdf>
- Canadian Centre on Substance Use and Addiction. (2020b). *Stigma ends with me impact story*. <https://www.ccsa.ca/sites/default/files/2020-07/CCSA-Impact-Story-Stigma-Ends-With-Me-Summary-2020-en.pdf>
- Canadian Health Workforce Network & Mental Health Commission of Canada. (2021). COVID-19 impacts on the mental health and substance use health workforce in Canada. https://www.hhr-rhs.ca/images/MHSU_Infographic-FINAL_v2.pdf
- Canadian HIV/AIDS Legal Network. (2006.). *"Nothing about us without us": Greater, meaningful involvement of people who use illegal drugs: A public health, ethical, and human rights imperative* (2nd ed.). <http://www.hivlegalnetwork.ca/site/wp-content/uploads/2013/04/Greater+Involvement+-+Bklt+-+Drug+Policy+-+ENG.pdf>
- Canadian Institutes of Health Research. (2016). About us: Knowledge translation — definition. <http://www.cihr-irsc.gc.ca/e/29418.html#2>
- Canadian Medical Association. (2018). *CMA national physician health survey: A national snapshot, October 2018*. <https://www.cma.ca/sites/default/files/2018-11/nph-survey-e.pdf>
- Canadian Press. (2018, July 24). Ontario to review safe injection, overdose prevention sites, health minister says: Health Minister Christine Elliott says province looking at sites to see if they 'have merit.' *CBC News*. <https://www.cbc.ca/news/canada/toronto/ontario-safe-injection-sites-limbo-1.4760002>
- Canadian Standards Association. (2013). *Psychological health and safety in the workplace — Prevention, promotion, and guidance to stages implementation*. <https://www.csagroup.org/store-resources/documents/codes-and-standards/2421865.pdf>
- Centre for Addiction and Mental Health. (n.d.). Is there a cost to protecting, caring for and saving others? Beware of compassion fatigue. <https://www.camh.ca/en/camh-news-and-stories/is-there-a-cost-to-protecting-caring-for-and-saving-others-beware-of-compassion-fatigue>
- Centre for Addiction and Mental Health. (2020). Workplace mental health: A review and recommendations. <https://www.camh.ca/-/media/files/workplace-mental-health/workplacementmentalhealth-a-review-and-recommendations-pdf.pdf>
- Chaudhry, H. J., Walker-McGill, C., & Dzau, V. J. (2021). Coordination needed to address clinician well-being and the opioid epidemic. *JAMA*, 325(23), 2341–2342. <https://doi.org/10.1001/jama.2021.6694>
- Chen, R., Sun, C., Chen, J. J., Jen, H. J., Kang, X. L., Kao, C. C., & Chou, K. (2021). A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 pandemic. *International Journal of Mental Health Nursing*, 30(1), 102–116. <https://doi.org/10.1111/inm.12796>
- Clough, B. A., March, S., Chan, R. J., Casey, L. M., Phillips, R., & Ireland, M. J. (2017). Psychosocial interventions for managing occupational stress and burnout among medical doctors: A systematic review. *Systematic Reviews*, 6(1), Article 144. <https://doi.org/10.1186/s13643-017-0526-3>
- Cocchiara, R. A., Peruzzo, M., Mannocci, A., Ottolenghi, L., Villari, P., Polimeni, A., ... La Torre, G. (2019). The use of yoga to manage stress and burnout in healthcare workers: A systematic review. *Journal of Clinical Medicine*, 8(3), Article 284. <https://doi.org/10.3390/jcm8030284>
- Cocker, F., & Joss, N., (2016). Compassion fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health*, 13(6), Article 618. <https://doi.org/10.3390/ijerph13060618>
- Cook-Cottone, C. P., & Guyker, W. M. (2018). The development and validation of the Mindful Self-Care Scale (MSCS): An assessment of practices that support positive embodiment. *Mindfulness*, 9(1), 161–175. <https://doi.org/10.1007/s12671-017-0759-1>
- Community Addictions Peer Support Association. (2021). Understanding substance use health: A matter of equity. [Manuscript in preparation].
- Cui, P. P., Wang, P. P., Wang, K., Ping, Z., Wang, P., & Chen, C. (2021). Post-traumatic growth and influencing factors among frontline nurses fighting against COVID-19. *Occupational and Environmental Medicine*, 78(2), 129–135. <https://doi.org/10.1136/oemed-2020-106540>



- Dechman, M. K. (2015). Peer helpers' struggle to care for "others" who inject drugs. *International Journal of Drug Policy*, 26(5), 492–500. <https://doi.org/10.1016/j.drugpo.2014.12.010>
- De La Rosa, G. M., Webb-Murphy, J. A., Fesperman, S. F., & Johnston, S. L. (2018). Professional quality of life normative benchmarks. *Psychological Trauma: Theory, Research, Practice and Policy*, 10(2), 225–228. <https://doi.org/10.1037/tra0000263>
- DesRoches, D. I., Deacon, S. H., Rodriguez, L. M., Sherry, S. B., Nogueira-Arjona, R., Elgendi, M. M., ... Stewart, S. (2021). Homeschooling during COVID-19: Gender differences in work–family conflict and alcohol use behaviour among romantic couples. *Social Sciences*, 10(7), Article 240. <https://doi.org/10.3390/socsci10070240>
- EQUIP Health Care. (2019). *Preventing, recognizing & addressing vicarious trauma*. <https://equiphealthcare.ca/files/2019/12/EQUIP-GTV-Tool-Vicarious-Trauma-Nov-25-2019.pdf>
- Expert Advisory Committee on Supervised Injection Site Research. (2008). *Vancouver's INSITE service and other supervised injection sites: What has been learned from the research?* <https://www.canada.ca/en/health-canada/corporate/about-health-canada/reports-publications/vancouver-insite-service-other-supervised-injection-sites-what-been-learned-research.html>
- Friesen, E. L., Kurydak, P. A., Gomes, T., Kolla, G., Leece, P., Zhu, L., ... Mah, L. (2021). The impact of the COVID-19 pandemic on opioid-related harm in Ontario. *Science Briefs of the Ontario COVID-19 Science Advisory Table*, 2(42). <https://doi.org/10.47326/ocsat.2021.02.42.1.0>
- Frost, M. C., Sweek, E. W., Austin, E. J., Corcorran, M. A., Juarez, A. M., Frank, N. D. ... Glick, S. N. (2021). Program adaptations to provide harm reduction services during the COVID-19 pandemic: A qualitative study of syringe services programs in the U.S. *AIDS and Behavior*. <https://doi.org/10.1007/s10461-021-03332-7>
- Gomes, T., Murray, R., Kolla, G., Leece, P., Bansal, S., Besharah, J., ... & Watford, J. (2021). Changing circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic. Toronto, Ont. Ontario Drug Policy Research Network. https://www.publichealthontario.ca/-/media/documents/c/2021/changing-circumstances-surrounding-opioid-related-deaths.pdf?sc_lang=en
- Government of Alberta. (2019, Aug. 19). Expert panel to review supervised consumption sites [news release]. <https://www.alberta.ca/release.cfm?xID=64325A908870E-CB08-8889-C1469DB961796FA8>
- Government of Canada. (2020). A strong and more resilient Canada: Speech from the throne to open the second session of the forty-third Parliament of Canada. https://www.canada.ca/content/dam/pco-bcp/documents/pm/SFT_2020_EN_WEB.pdf
- Greer, A., Bungay, V., Pauly, B., & Buxton, J. (2020). 'Peer' work as precarious: A qualitative study of work conditions and experiences of people who use drugs engaged in harm reduction work. *International Journal on Drug Policy*, 85, Article 102922. <https://doi.org/10.1016/j.drugpo.2020.102922>
- Greer, A., Buxton, J. A., Pauly, B., & Bungay, V. (2021). Organizational support for frontline harm reduction and systems navigation work among workers with living and lived experience: Qualitative findings from British Columbia, Canada. *Harm Reduction Journal*, 18(1), Article 60 <https://doi.org/10.1186/s12954-021-00507-2>
- Harm Reduction International. (2020). *The global state of harm reduction 2020* (7th ed.) https://www.hri.global/files/2021/03/04/Global_State_HRI_2020_BOOK_FA_Web.pdf
- Harm Reduction International. (2021). What is harm reduction? <https://www.hri.global/what-is-harm-reduction>
- Health Canada. (2018). Supervised consumption sites and services: Explained. <https://www.canada.ca/en/health-canada/services/substance-use/supervised-consumption-sites/explained.html>
- Health Canada. (2019a). *Opioid symposium: What we heard report*. https://publications.gc.ca/collections/collection_2019/sc-hc/H14-306-2019-eng.pdf
- Health Canada. (2019b). Opioids and the opioids crisis — Get the facts. <https://www.canada.ca/en/health-canada/services/substance-use/problematic-prescription-drug-use/opioids/get-the-facts.html>
- Health Canada. (2019c). Responding to Canada's opioid crisis. <https://www.canada.ca/en/health-canada/services/substance-use/problematic-prescription-drug-use/opioids/responding-canada-opioid-crisis.html>



- Health Canada. (2021a). Helping people who use substances during the COVID-19 pandemic. <https://www.canada.ca/en/health-canada/services/substance-use/helping-people-who-use-substances-covid-19.html>
- Health Canada. (2021b). Interactive map: Canada's response to the opioid crisis. <http://health.canada.ca/en/health-canada/services/drugs-medication/opioids/responding-canada-opioid-crisis/map.html>
- Health Canada Expert Task Force on Substance Use. (2021). *Report #2: Recommendations on the federal government's drug policy as articulated in a draft Canadian drugs and substances strategy (CDSS)*. <https://www.canada.ca/content/dam/hc-sc/documents/corporate/about-health-canada/public-engagement/external-advisory-bodies/reports/report-2-2021/report-2-HC-expert-task-force-on-substance-use-final-en.pdf>
- Heimer, R., McNeil, R., & Vlahov, D. (2020). A community responds to the COVID-19 pandemic: A case study in protecting the health and human rights of people who use drugs. *Journal of Urban Health*, 97(4), 448–456. <https://doi.org/10.1007/s11524-020-00465-3>
- Hotchkiss, J. T. (2018). Mindful self-care and secondary traumatic stress mediate a relationship between compassion satisfaction and burnout risk among hospice care professionals. *American Journal of Hospice and Palliative Medicine*, 35(8), 1099–1108. <https://doi.org/10.1177/1049909118756657>
- Hotchkiss, J. T. & Leshner, R. (2018). Factors predicting burnout among chaplains: Compassion satisfaction, organizational factors, and the mediators of mindful self-care and secondary traumatic stress. *Journal of Pastoral Care and Counseling*, 72(2), 86–98. <https://doi.org/10.1177/1542305018780655>
- Hunsaker, S., Chen, H. C., Maughan, D., & Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholarship*, 47(2), 186–194. <https://doi.org/10.1111/jnu.12122>
- Irvine, M. A., Kuo, M., Buxton, J. A., Balshaw, R., Otterstatter, M., Macdougall, L., ... Gilbert, M. (2019). Modelling the combined impact of interventions in averting deaths during a synthetic-opioid overdose epidemic. *Addiction*, 114(9), 1602–1613. <https://doi.org/10.1111/add.14664>
- Jozaghi, E., Maynard, R., Dadakhah-Chimeh, Z., Yake, K., & Blyth, S. (2018). The synthetic opioid epidemic and the need for mental health support for first responders who intervene in overdose cases. *Canadian Journal of Public Health*, 109(2), 231–232. <https://doi.org/10.17269/s41997-018-0044-7>
- Kanno, H., & Giddings, M. M. (2017). Hidden trauma victims: Understanding and preventing traumatic stress in mental health professionals. *Social Work in Mental Health*, 15(3), 331–353. <https://doi.org/10.1080/015332985.2016.1220442>
- Kennedy, M. C., Boyd, J., Mayer, S., Collins, A., Kerr, A., & McNeil, R. (2019). Peer worker involvement in low-threshold supervised consumption facilities in the context of an overdose epidemic in Vancouver, Canada. *Social Science & Medicine*, 225, 60–68. <https://doi.org/10.1016/j.socscimed.2019.02.014>
- Kerman, N., Ecker, J., Gaetz, S., Tiderington, E., & Kidd, S. A. (2021). Mental health and wellness of services providers working with people experiencing homelessness in Canada: A national survey from the second wave of the COVID-19 pandemic. *Canadian Journal of Psychiatry*. Advanced online publication. <https://doi.org/10.1177/07067437211018782>
- Kerr, T., Mitra, S., Kennedy, M. C., & McNeil, R. (2017). Supervised injection facilities in Canada: Past, present, and future. *Harm Reduction Journal*, 14(1), Article 28. <https://doi.org/10.1186/s12954-017-0154-1>
- Khorasheh, T., Kolla, G., Kenny, K., & Bayoumi, A. (2021). Impacts of overdose on front-line harm reduction workers in the City of Toronto. Toronto, Ont.: MAP Centre for Urban Health Solutions. https://maphealth.ca/wp-content/uploads/Bayoumi_HRW_BriefReport.pdf
- King, B., Patel, R., & Rishworth, A. (2021). Assessing the relationships between COVID-19 stay-at-home orders and opioid overdoses in the state of Pennsylvania. *Journal of Drug Issues*, 51(4), 648–660. <https://doi.org/10.1177/00220426211006362>
- Kolla, G., Strike, C., Watson, T. M., Jairam, J., Fischer, B., & Bayoumi, A. M. (2017). Risk creating and risk reducing: Community perceptions of supervised consumption facilities for illicit drug use. *Health, Risk & Society*, 19(1-2), 91–111. <https://doi.org/10.1080/13698575.2017.1291918>

- Kolla, G., & Strike, C. (2019). 'It's too much, I'm getting really tired of it': Overdose response and structural vulnerabilities among harm reduction workers in community settings. *International Journal of Drug Policy*, 74, 127–135. <https://doi.org/10.1016/j.drugpo.2019.09.012>
- Kolla, G., & Strike, C. (2021). Medicalization under prohibition: The tactics and limits of medicalization in the spaces where people use illicit drugs. *Drugs: Education, Prevention and Policy*, 28(2), 127–137. <https://doi.org/10.1080/09687637.2020.1769029>
- Kriakous, S. A., Elliott, K. A., Lamers, C., & Owen, R. (2020). The effectiveness of mindfulness-based stress reduction on the psychological functioning of healthcare professionals: A systematic review. *Mindfulness*. Advance online publication. <https://doi.org/10.1007/s12671-020-01500-9>
- Kunzler, A. M., Helmreich, I., Chmitorz, A., König, J., Binder, H., Wessa, M., & Lieb, K., (2020). Psychological interventions to foster resilience in healthcare professionals. *Cochrane Database of Systematic Reviews*, 7, Article CD012527. <https://doi.org/10.1002/14651858.CD012527.pub2>
- Machin, L., Bartlam, R., & Bartlam, B. (2015). Identifying levels of vulnerability in grief using the Adult Attitude to Grief scale: From theory to practice. *Bereavement Care*, 34(2), 59–68. <https://doi.org/10.1080/02682621.2015.1063859>
- Madden, E. F., Prevedel, S., Light, T., & Sulzer, S. H. (2021). Intervention stigma toward medications for opioid use disorder: A systematic review. *Substance Use & Misuse*, 56(14), 2181–2201. <https://doi.org/10.1080/10826084.2021.1975749>
- Magill, E., Siegal, Z., & Pike, K. M. (2020). The mental health of frontline health care providers during pandemics: A rapid review of the literature. *Psychiatric Services*, 71(12), 1260–1269. <https://doi.org/10.1176/appi.ps.202000274>
- Mamdani, Z., McKenzie, S., Pauly, B., Cameron, F., Conway-Brown, J., Edwards, D., ... Buxton, J. (2021). "Running myself ragged": Stressors faced by peer workers in overdose response settings. *Harm Reduction Journal*. 8(1), Article 18. <https://doi.org/10.1186/s12954-020-00449-1>
- Mauder, R. G., Heeney, N. D., Strudwick, G., Shin, H. D., O'Neill, B., Young, N., ... Mah, L. (2021). Burnout in hospital-based healthcare workers during COVID-19. *Science Briefs of the Ontario COVID-19 Science Advisory Table*, 2(46), <https://doi.org/10.47326/ocsat.2021.02.46.1.0>
- McCall, J., Phillips, J. C., Estafan, A., & Caine, V. (2019). Exploring the experiences of staff working at an opiate assisted treatment clinic: An interpretive descriptive study. *Applied Nursing Research*, 45, 45–51. <https://doi.org/10.1016/j.apnr.2018.12.003>
- Mental Health Commission of Canada. (2021). COVID-19, mental wellness, and the homelessness workforce. Ottawa, Ont.: Mental Health Commission of Canada. https://www.mentalhealthcommission.ca/sites/default/files/2021-07/covid_mental_wellness_homelessness_workforce_eng.pdf
- Moustaqim-Barrette, A., Elton-Marshall, T., Leece, P., Morissette, C., Rittenbach, K., & Buxton, J. (2019). *Environmental scan: Naloxone access and distribution in Canada*. Vancouver: Canadian Research Initiative in Substance Misuse (CRISM). https://crism.ca/wp-content/uploads/2019/06/CRISM_Enviro-Scan_Final-Draft_June18.pdf
- Naehrig, D., Schokman, A., Hughes, J. K., Epstein, R., Hickie, I. B., & Glozier, N. (2021). Effect of interventions for the well-being, satisfaction and flourishing of general practitioners – a systematic review. *British Medical Journal Open*, 11(8), Article e046599. <https://doi.org/10.1136/bmjopen-2020-046599>
- National Advisory Committee on Prescription Drug Misuse. (2013). *First do no harm: Responding to Canada's prescription drug crisis*. Ottawa, Ont.: Canadian Centre on Substance Abuse. <https://www.ccsa.ca/sites/default/files/2019-04/Canada-Strategy-Prescription-Drug-Misuse-Report-en.pdf>
- Noyes, E., Yeo, E., Yerton, M., Plakas, I., Keyes, S., Obando, A., ... Chatterjee, A. (2021). Harm reduction for adolescents and young adults during the COVID-19 pandemic: A case study of community care in reach. *Public Health Reports*, 136(3), 301–308. <https://doi.org/10.1177/0033354921999396>
- Olding, M., Barker, A., McNeil R., & Boyd, J. (2021). Essential work, precarious labour: The need for safer and equitable harm reduction work in the era of COVID-19. *International Journal of Drug Policy*, 90, Article 103076. <https://doi.org/10.1016/j.drugpo.2020.103076>



- Olding, M., Boyd, J., Kerr, T., & McNeil, R. (2021). “And we just have to keep going”: Task shifting and the production of burnout among overdose response workers with lived experience. *Social Science & Medicine*, 270, Article 113631. <https://doi.org/10.1016/j.socscimed.2020.113631>
- Parkes, T., Carver, H., Masterton, W., Falzon, D., Dumbrell, J., Grant, S., & Wilson, I. (2021). ‘They already operated like it was a crisis, because it always has been a crisis’: A qualitative exploration of the response of one homeless service in Scotland to the COVID-19 pandemic. *Harm Reduction Journal*, 18(1), Article 26. <https://doi.org/10.1186/s12954-021-00472-w>
- Pauly, B., Mamdani, Z., Mesley, L., McKenzie, S., Cameron, F., Edwards, D., ... Buxton, J. A. (2021). “It’s an emotional roller coaster ... But sometimes it’s fucking awesome”: Meaning and motivation of work for peers in overdose response environments in British Columbia. *International Journal of Drug Policy*, 88, Article 103015. <https://doi.org/10.1016/j.drugpo.2020.103015>
- Phillips, C. S., & Becker, H., (2019). Systematic review: Expressive arts interventions to address psychosocial stress in healthcare workers. *Journal of Advanced Nursing*, 75(11), 2285–2298. <https://doi.org/10.1111/jan.14043>
- Professional Quality of Life. (2021). ProQOL—Frequently asked questions. <https://proqol.org/faq>
- Public Health Agency of Canada. (2020). Vulnerable populations and COVID-19. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/vulnerable-populations-covid-19.html>
- Public Health Agency of Canada (2021, May 18). How has COVID-19 impacted access to STBBI-related health services, including harm reduction services, for people who use drugs or alcohol in Canada? <https://health-infobase.canada.ca/datalab/covid-19-stbbi-services.html>
- Radfar, S. R., De Jong, C. A. J., Farhoudian, A., Ebrahimi, M., Rafei, P., Vahidi, M., ... & Baldacchino, A. M. (2021). Reorganization of substance use treatment and harm reduction services during the COVID-19 pandemic: A global survey. *Frontiers in Psychiatry*, 12, Article 639393. <https://doi.org/10.3389/fpsy.2021.639393>
- Roxburgh, A., Jauncey, M., Day, C., Bartlett, M., Cogger, S., Dietze, P., ... Clark, N. (2021). Adapting harm reduction services during COVID-19: Lessons from the supervised injecting facilities in Australia. *Harm Reduction Journal*, 18, Article 20. <https://doi.org/10.1186/s12954-021-00471-x>
- Ruiz-Fernández, M. D., Pérez-García, E., & Ortega-Galán, Á. M. (2020). Quality of life in nursing professionals: Burnout, fatigue, and compassion satisfaction. *International Journal of Environmental Research and Public Health*, 17(4), Article 1253. <https://doi.org/10.3390/ijerph17041253>
- Russell, C., Ali, F., Nafeh, F., Rehm, J., LeBlanc, S., & Elton-Marshall, T. (2021). Identifying the impacts of the COVID-19 pandemic on service access for people who use drugs (PWUD): A national qualitative study. *Journal of Substance Abuse Treatment*, 129, Article 108374. <https://doi.org/10.1016/j.jsat.2021.108374>
- Sansó, N., Galiana, L., Oliver, A., Pascual, A., Sinclair, S., & Benito, E. (2015). Palliative care professionals’ inner life: Exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. *Journal of Pain and Symptom Management*, 50(2), 200–207. <https://doi.org/10.1016/j.jpainsymman.2015.02.013>
- Shepard, B. C. (2013). Between harm reduction, loss and wellness: On the occupational hazards of work. *Harm Reduction Journal*, 10, Article 5. <https://doi.org/10.1186/1477-7517-10-5>
- Shreffler, J., Shreffler, M., Murfree, J. R., & Huecker, M. (2021). A global pandemic and substance use disorder: Healthcare professionals’ viewpoints on the merging of two crises. *Substance Use & Misuse*, 56(10), 1476–1482. <https://doi.org/10.1080/10826084.2021.1936052>
- Sim, J., Machin, L., & Bartlam, B. (2014). Identifying vulnerability in grief: Psychometric properties of the Adult Attitude to Grief Scale. *Quality of Life Research*, 23(4), 1211–1220. <https://doi.org/10.1007/s11136-013-0551-1>
- Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., & Smith-MacDonald, L. (2017, April). Compassion fatigue: A meta-narrative review of the healthcare literature. *International Journal of Nursing Studies*, 69, 9–24. <https://doi.org/10.1016/j.ijnurstu.2017.01.003>



Special Advisory Committee on the Epidemic of Opioid Overdoses. (2021, September). Opioid and stimulant-related harms in Canada. Ottawa, Ont.: Public Health Agency of Canada. <https://health-infobase.canada.ca/datalab/national-surveillance-opioid-mortality.html>

Stamm, B. H. (2009). ProQOL Measure. <https://proqol.org/proqol-measure>

Stamm, B. H. (2010). *The concise ProQOL manual*, 2nd ed. Pocatello, ID: ProQOL.org.

Statistics Canada. (2021, July 12). Provisional death counts and excess mortality, January 2020 to April 2021. *The Daily*. <https://www150.statcan.gc.ca/n1/daily-quotidien/210712/dq210712b-eng.htm>

Taha, S., Maloney-Hall, B., & Buxton, J. (2019). Lessons learned from the opioid crisis across the pillars of the Canadian drugs and substances strategy. *Substance Abuse Treatment, Prevention, and Policy*, 14(1), Article 32. <https://doi.org/10.1186/s13011-019-0220-7>

Tamoliaki, A., & Kalaitzaki, A. E. (2020) "That which does not kill us, makes us stronger": COVID-19 and posttraumatic growth. *Psychiatry Research*, 289, Article 113044. <https://doi.org/10.1016/j.psychres.2020.113044>

World Health Organization. (2020, Mar. 11). WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

World Health Organization. (2020). The impact of COVID-19 on mental, neurological and substance use services: Results of a rapid assessment. <https://www.who.int/publications/i/item/978924012455>

World Health Organization. (2021). Year of health and care workers. <https://www.who.int/campaigns/annual-theme/year-of-health-and-care-workers-2021>

Zhang, M., Murphy, B., Cabanilla, A., & Yidi, C. (2021). Physical relaxation for occupational stress in healthcare workers: A systematic review and network meta-analysis or randomized controlled trials. *Journal of Occupational Health*, 63(1), Article e12243. <https://doi.org/10.1002/1348-9585.12243>



Appendix A: Survey: The Experiences of Individuals Providing Harm Reduction Services

We are grateful that you are interested in sharing your experiences with us. To begin, please answer the questions below to ensure that you are eligible to complete the survey.

Harm reduction can take many forms. For the purpose of this survey, “harm reduction” means reducing the negative consequences associated with drug use through the delivery of health and social services, programs and practices. Some examples include needle and syringe programs, naloxone distribution, opioid substitution or maintenance treatment, counselling, safer-use education, HIV/HCV testing and drug testing.

ELIGIBILITY QUESTIONS

1. **Do you provide harm reduction services for people who use drugs in Canada?**

Yes

No

2. **What is your current age?**

19 years + (please enter your age in years)

18 years

Under 18 years

3. **In which province or territory do you live?**

British Columbia

Alberta

Saskatchewan

Manitoba

Ontario

Quebec

New Brunswick

Nova Scotia

Prince Edward Island

Newfoundland and Labrador

Yukon

Northwest Territories

Nunavut

Outside of Canada

[If Q1 = NO, OR Q2 = Under 18, OR if Q2 = 18 years AND any province or territory **other than** Quebec, Alberta, Ontario, Saskatchewan, PEI or Manitoba, OR if Q3 = 66 (Outside of Canada), then ineligible]



BACKGROUND INFORMATION

The first few questions are to gather general information.

1. What is the size of the community in which you provide harm reduction services?

Large urban population centre (100,000 or more)

Medium population centre (30,000 to 99,999)

Small population centre (1,000 to 29,999)

Other _____

Don't know

2. Which of the following descriptions apply to your community?

An urban or suburban setting (in a city or town)

A rural setting (within a short drive of a city or town)

A remote or isolated setting (a great distance away from the nearest city or town)

3. Please indicate your gender.

Female gender

Male gender

Gender diverse

Prefer not to say

Not listed, please specify: _____

4. What is your ethnic background? _____

5. Do you identify as First Nations, Métis or Inuk?

Yes

No

If yes,

6. Which do you mainly identify as?

First Nations

Métis

Inuk

7. What is your current marital status?

Single, never married

In a common-law relationship

Legally married (and not separated)

Separated, but still legally married

Divorced

Widowed



8. What is the highest level of education that you have completed?

Less than high school

High school diploma

General Educational Development (GED) or Adult Basic Education (ABED)

Some college or technical school (no certificate or diploma)

College or technical school graduate

Undergraduate university degree

Professional degree (e.g., law, medicine)

Graduate degree (Master's, PhD)

Other (please specify): _____

9. In providing harm reduction services, which of the following represents your situation? Please check all that apply.

Employed full time

Employed part time

Volunteer full time

Volunteer part time

Other (please specify): _____

10. Thinking about your employment related to harm reduction, about how many hours do you work or volunteer at such employment per week, on average?

Number of hours: _____

11. What type of harm reduction services do you personally provide? (Please check all that apply.)

Needle/harm reduction supplies/equipment distribution

Safer substance use and harm reduction education

Street patrol/overdose response team

Overdose response training and naloxone distribution

Counselling

Opioid agonist therapy

Peer providing support services to others

Training or supporting peers that I work with

Referral to treatment

Navigation of services including health, housing, social assistance, etc.

Drug checking/testing

No direct services, but manage project

No direct services, but manage team

Pharmacy

Other (please specify): _____



12. In which setting do you work? (Please check all that apply.)

Supervised consumption site

Overdose prevention site

Addiction treatment program in hospital

Addiction treatment program in community

Public health unit

Organization of people who use substances (user groups)

Indigenous agency/friendship centre

Community outreach team/ACT team

Outreach, including needle pickup/sweep

Family practice/family health team

Community health centre

Pharmacy

EMT/first response

Other (please specify): _____

13. How long have you been working in harm reduction?

Years: _____ Months: _____

14. Have there been periods of interruption during your time providing harm reduction services?

Yes

No

If yes,

15. Please tell us why your work has been interrupted? Please check all that apply.

Changes to funding for services

Changes to programs

Personal decision

Other, please specify: _____

16. What is the title for your current role? _____

17. How long have you been working in this particular role?

Years: _____ Months: _____



PROFESSIONAL QUALITY OF LIFE

When you provide harm reduction services to people who use drugs, you may have direct contact with their lives. Your compassion and empathy for those you work with can affect you in positive and negative ways. The following questions are about your experiences as a person who provides harm reduction services in some capacity. Consider each of the following questions about you and your current work situation. Click the response that honestly reflects how frequently you experienced these things in the **last 30 days**.

18. I am happy.

- Very often
- Often
- Sometimes
- Rarely
- Never

[The following questions use the above response options scale.]

19. I am preoccupied with more than one person I provide services to.
20. I get satisfaction from being able to help people.
21. I feel connected to others.
22. I jump or am startled by unexpected sounds.
23. I feel invigorated after working with those I help.
24. I find it difficult to separate my personal life from my life as a helper.
25. I am not as productive at work because I am losing sleep over traumatic experiences of a person I provide or provided services to.
26. I think that I might have been affected by the traumatic stress of those I help.
27. I feel trapped by my job providing harm reduction services.
28. Because of my job, I have felt “on edge” about various things.
29. I like my work in harm reduction.
30. I feel depressed because of the traumatic experiences of the people I help.
31. I feel as though I am experiencing the trauma of someone I have helped.
32. I have beliefs that sustain me.
33. I am pleased with how I am able to keep up with harm reduction techniques and protocols.
34. I am the person I always wanted to be.
35. My work makes me feel satisfied.
36. I feel worn out because of my harm reduction work.
37. I have happy thoughts and feelings about those I help and how I could help them.
38. I feel overwhelmed because my case workload seems endless.
39. I believe I can make a difference through my work.
40. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.
41. I am proud of what I can do to provide harm reduction services.
42. As a result of my work in harm reduction, I have intrusive, frightening thoughts.
43. I feel “bogged down” by the system.
44. I have thoughts that I am a “success” as a helper.
45. I can’t recall important parts of my work with trauma victims.
46. I am a very caring person.
47. I am happy that I chose to do this work.
48. Is there anything else about your **professional quality of life** that you’d like to share?



SELF-CARE

In this section of the survey, we would like to learn about the types of self-care behaviours you might engage in, as well as the frequency of the behaviours. Please click the answer that reflects the frequency with which you did the following behaviours (how much or how often) within the **past week**.

20. **I did something intellectual** (using my mind) to help me relax (e.g., read a book, wrote).

Regularly (6 to 7 days)

Often (4 to 5 days)

Sometimes (2 to 3 days)

Rarely (1 day)

Never (0 days)

[The following questions use the above response options scale.]

21. I did something interpersonal to relax (e.g., connected with friends).
22. I did something creative to relax (e.g., drew, played an instrument, wrote creatively, sang).
23. I listened to relax (e.g., to music, a podcast, radio show, rainforest sounds).
24. I sought out images to relax (e.g., art, film, window-shopping, nature).
25. I sought out smells to relax (e.g., lotions, nature, candles, incense, baking).
26. I drank at least 6–8 cups of water per day.
27. I ate a variety of nutritious foods (e.g., vegetables, protein, fruits and grains).
28. I planned my meals and snacks.
29. I exercised at least 30–60 minutes.
30. I took part in sports, dance or other scheduled activities (e.g., sports teams, dance classes).
31. I did sedentary activities instead of exercising (e.g., watched TV, worked on the computer).
32. I planned or scheduled my exercise for the day.
33. I practised yoga or another mind/body practice (e.g., Tae Kwon Do, Tai Chi).
34. I kindly acknowledged my own challenges and difficulties.
35. I engaged in supportive and comforting self-talk (e.g., “My effort is valuable and meaningful”).
36. I reminded myself that failure and challenge are part of the human experience.
37. I gave myself permission to feel my feelings (e.g., allowed myself to cry).
38. I experienced meaning and/or a larger purpose in my **work** life (e.g., for a cause).
39. I experienced meaning and/or a larger purpose in my **private/personal** life (e.g., for a cause).
40. I spent time with people who are good to me (e.g., support, encourage, believe in me).
41. I scheduled or planned time to be with people who are special to me.
42. I felt supported by people in my life.
43. I felt confident that people in my life would respect my choice if I said “no.”
44. I felt that I had someone who would listen to me if I became upset (e.g., friend, counsellor, group).
45. I maintained a manageable schedule.
46. I kept my work area organized to support my work tasks.
47. I maintained balance between the demands of others and what is important to me.
48. I maintained a comforting and pleasing living environment.



49. I had a calm awareness of my thoughts.

50. I had a calm awareness of my feelings.

51. I had a calm awareness of my body.

52. I carefully selected which of my thoughts and feelings I used to guide my actions.

53. Is there anything else regarding your self-care practices that you would like to share?

54. Have you used alcohol or other drugs to cope with your experiences providing harm reduction services?

Yes

No

If yes,

55. Please tell us which substances you have used.

56. Please tell us what setting you have used these substances in:

At home

At work

In a public place (e.g., restaurant/bar, public park)

Safe consumption site

Other, please specify: _____

57. Do you have any concerns about using substances as a coping method?

Yes

No

If yes,

58. Please describe your concerns about using substances to cope with your experiences providing harm reduction services.

59. Do you feel that your use of substances to cope with work-related difficulties is affecting any aspect of your life (e.g., health, relationships, work performance, general well-being)?

Yes

No

If yes,

60. Please describe how using substances to cope is affecting your life.



GRIEF

In this section of the survey, we would like to understand more about the grief that you have experienced due to the loss of people with whom you work or serve, in the context of the overdose crisis. Please click on your response to the attitudes expressed in the following statements:

61. I feel able to face the pain that comes with loss.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

[The following questions use the above response options scale.]

- 62. For me, it is difficult to switch off thoughts about the person/people I have lost.
- 63. I feel very aware of my inner strength when faced with grief.
- 64. I believe that I must be brave in the face of loss.
- 65. I feel that I will always carry the pain of grief with me.
- 66. For me, it is important to keep my grief under control.
- 67. Life has less meaning for me after this loss/these losses.
- 68. I think it is best to just get on with life and not dwell on this loss/these losses.
- 69. It may not always feel like it, but I do believe that I will come through this experience of grief.
- 70. Is there anything else regarding your grief that you would like to share?



STIGMA

In this section of the survey, we would like to understand more about the potential **stigma** you experience while performing your harm reduction work. Stigma can be experienced in many different ways. It may involve feelings of disapproval or disgrace.

71. Do you feel or have you ever felt stigmatized in relation to your harm reduction work?

Yes

No

If yes,

72. In what way(s) do you feel you are stigmatized because of your work?

RESOURCES, PROGRAMS AND SUPPORTS

This section of the survey asks about the resources, programs and supports you have, as well as those you feel like you require (but are missing) in your work environment.

73. Please describe what supports and resources you feel are in place that are helpful to you in your role.

74. Please describe what you feel is lacking in terms of how your work and well-being are supported in the workplace (and please provide any solutions you feel might be beneficial).

75. Is there anything else you would like to tell us about your work and your experiences?



Appendix B: Survey: Additional Questions Included in 2021 Survey

How we are impacted by the day-to-day experiences of providing harm reduction services may be influenced by our own past experience. To better describe the experience of harm reduction work on different types of workers, we would like to know whether you identify as someone with lived or living experience of substance use.

Are you a peer support, experiential or a person-to-person mutual support worker (that is, someone with lived or living experience with substance use) who provides harm reduction services?

Yes

No

Prefer not to say

Not listed, please specify: _____

Please select the statement that is most applicable to your occupation or profession:

I work in a regulated profession (one that requires certification, registration, licensing or is overseen by a regulatory body)

I work in an unregulated profession

Don't know

Prefer not to answer

Not listed, please specify: _____

Have your feelings about your work or the ways in which your work impacts your quality of life changed since the onset of the COVID-19 pandemic?

Yes

No

If yes,

Please tell us what has changed and any opinions you have about the reason for any changes.

Have your self-care practices changed since the onset of the pandemic?

Yes

No



If yes,

Please tell us what has changed and any opinions you have about the reason for any changes.

Has your use of substances to cope with work-related difficulties changed since the onset of the pandemic?

Yes

No

If yes,

Please tell us what has changed and any opinions you have about the reason for any changes.

Have your grief responses and feelings changed since the onset of the COVID-19 pandemic?

Yes

No

If yes,

Please tell us what has changed and any opinions you have about the reason for any changes.

Have the types of resources, programs and supports you have access to or the way you access them changed since the beginning of the COVID-19 pandemic?

Yes

No

If yes,

Please tell us what has changed and any opinions you have about the impact of any changes.

Have you incorporated virtual care into your harm reduction service delivery since the onset of the COVID-19 pandemic?

Yes

No



If yes,

Please tell us the extent to which you agree to the following statements about providing harm reduction services virtually:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Not applicable/ prefer not to answer
I am comfortable with supporting a client virtually.						
Clients appear comfortable with receiving virtual support.						
Virtual services and supports are just as effective as in-person services and supports.						
Virtual visits are just as good as in-person visits for building a relationship with a client.						
I have the appropriate training and skills to support clients virtually.						
Virtual appointments are more convenient than in-person appointments.						
Most clients are able to access virtual services easily (e.g., have access to a device, data or phone plan, or internet, safe or private space).						
When in-person service and support delivery resumes, I will continue to use virtual options to provide services and supports to clients.						



Canadian Centre
on **Substance Use**
and **Addiction**

Evidence. Engagement. Impact.