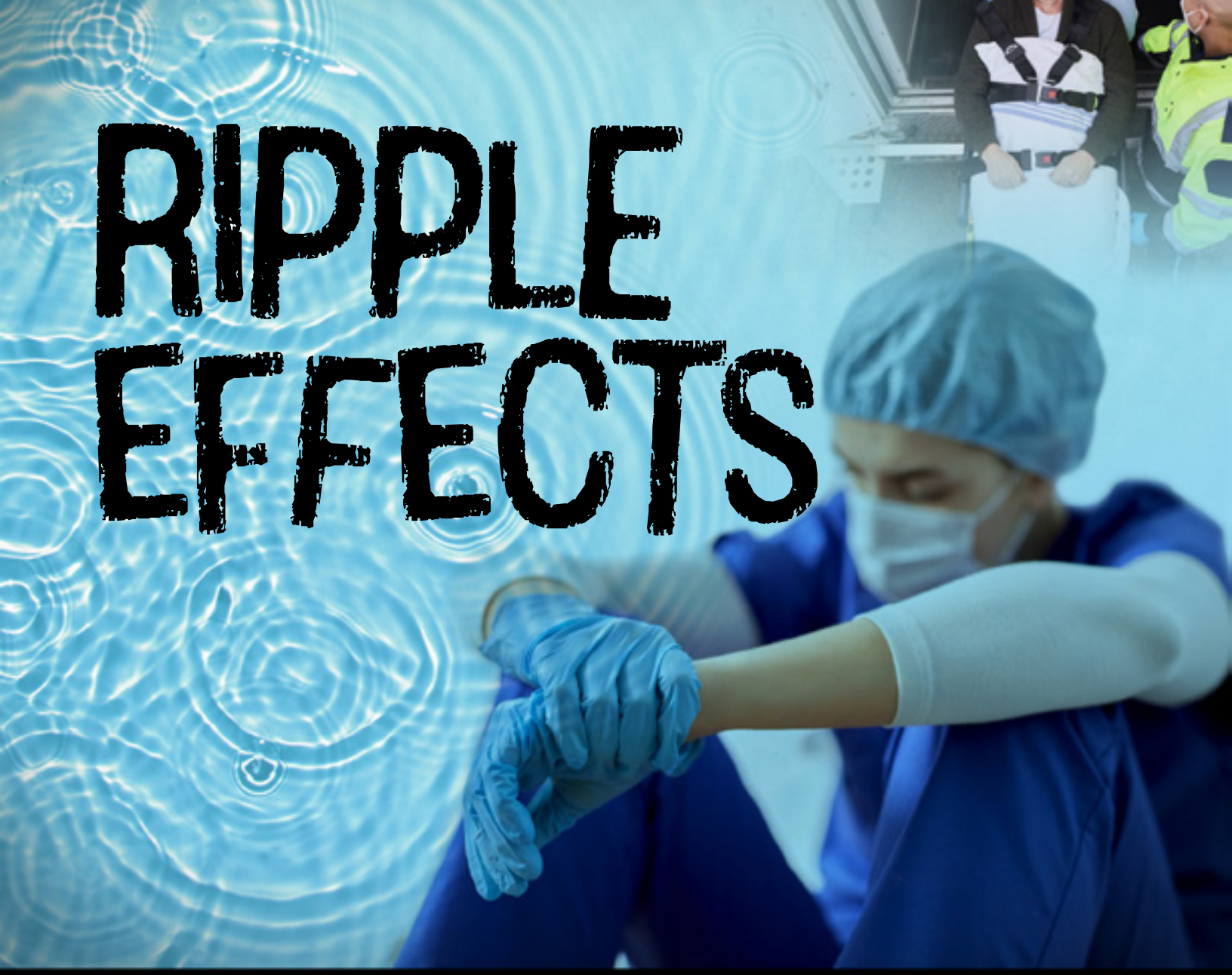
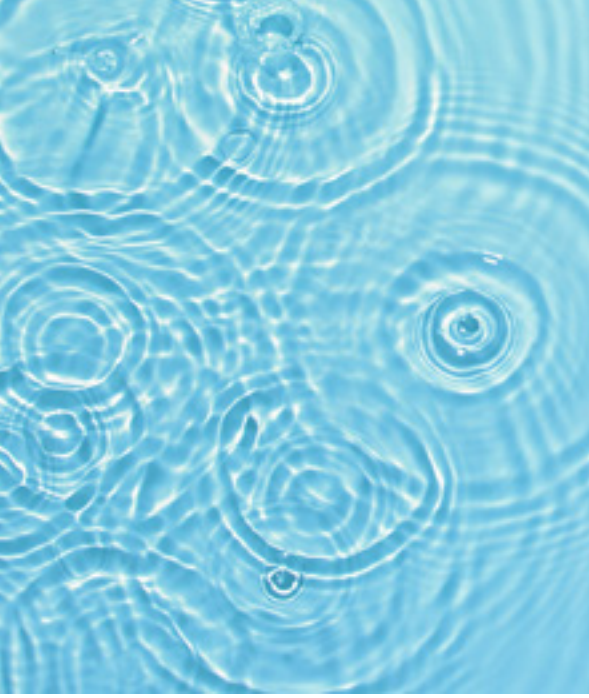


RIPPLE EFFECTS

THE DRUG TOXICITY CRISIS AND ITS IMPACT ON FRONTLINE HEALTH WORKERS

Jennifer Jackson

PARKLAND INSTITUTE



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Dr. **Jennifer Jackson**, PhD, is a Registered Nurse and an Associate Professor in the Faculty of Nursing at the University of Calgary. She has a joint appointment in the Department of Community Health Sciences, Cumming School of Medicine, University of Calgary. Dr. Jackson's research focuses on supporting health care workers in complex systems, primarily in community-based addiction treatment services. Dr. Jackson has conducted research with supervised consumption site professionals, outreach workers, municipal workers, and policy makers to support better health care services for all Albertans. She was named Top 40 Under 40 by Avenue Magazine in 2024.

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GLOSSARY

The language that is used around the drug poisoning crisis is fraught. While we want to avoid stigmatizing language, we also do not want to get bogged down in discussions about wording that produces a distinction, not a difference. In our survey, there was debate about the wording we used, and participants had contradictory sentiments. For example, some people wrote in our survey that "drug poisoning" was the most accurate term, while others preferred the term "overdose". We recognize that any choice we make will not satisfy everyone. However, we have worked with people with lived experience of drug use as paid peer researchers in our research team and proceeded with our best intentions. Where a participant has used a different word in their interview (such as "overdose" instead of "drug poisoning"), we have retained the participant's wording in their quotes.

We have chosen to use the following:

- **Clients:** anyone with addictions and/or mental health issues that has been affected by the drug poisoning crisis and accessed services provided by the health care professionals who participated in this study.
- **Drug(s):** any substance that is either illegal and consumed illicitly, or legal but consumed recreationally, outside of medical supervision, or for an off-label purpose, rather than its prescribed purpose and/or dose. Drugs may not consist of what a client expected (contained additives), as a result of the toxic drug supply.
- **Drug poisoning:** includes any adverse reaction to consuming a drug, synonymous with overdose, opioid overdose, drug reaction.
- **Drug poisoning crisis:** The rise in addiction and mental health crises that began in the 2010s and continues as an ongoing public health emergency, causing significant harm and mortality. This term covers overdose crisis and toxic drug crisis.
- **Homeless(ness):** When someone does not have a consistent, safe place to live. We do not assume a person who is homeless lacks community or a geographically bound routine. This term includes houseless(ness), unhoused, precariously housed, couch surfing, and people who use shelters or temporary housing.
- **Participants:** Health Sciences Association of Alberta (HSAA) members, who are health care professionals, who consented to participate in our research study. In our study, these professionals were:
    - Paramedic (Advanced/Primary)
    - Emergency Communications
    - Psychologist
    - Mental Health Therapist

- Addiction/Family Counselors
- Clinical Behavioural Specialist
- Social Worker
- Psychometrist
- Psychiatric Registered Nurse**
- Registered Nurse Mental Health Therapist**
- Cardiology Technologist
- Laboratory Technologist/Assistant
- Combined Laboratory X-Ray Technologist
- Medical Radiation Technologist
- Electroencephalogram Technologist
- Electroneurophysiology Technologist
- Computed Tomography Technologist
- Medical Laboratory Technologist /Assistant
- Medical Photographer
- Respiratory Therapist
- Dietitian
- Sonographer
- Tissue Specialist
- Pharmacist
- Pharmacy technologist
- Registered Nurse/Licenced Practical Nurse**
- Occupational therapist (OT)/Assistant
- Physiotherapist (PT)
- Recreation Therapists
- Speech-Language Pathologists (SLP)/Assistant
- Rehabilitation Practitioner
- Therapy Assistant

** Some nurses were included in this study, based on their workplace affiliation with HSAA. Most nurses in Alberta are members of the United Nurses of Alberta.

EXECUTIVE SUMMARY

While the incidents of opioid-related deaths or medical emergencies have increased, the resources and staff required to help the situation have not.

Drug poisoning deaths in Alberta have reached record numbers, with the province seeing 10,185 drug-related fatalities since 2016. While the incidents of opioid-related deaths or medical emergencies have increased, the resources and staff required to help the situation have not. Among those most affected have been Alberta's frontline health care workers, especially those dealing with emergency situations.

The effects of this crisis reach beyond opioid-related deaths and affects all Albertans through increased wait times in emergency rooms, violence, loss of loved ones, and a health care system losing vital workers due to burnout, stress, and a lack of support from management and the government.

The provincial government's response to this crisis has been to emphasize abstinence-based and inpatient therapies to the exclusion of harm reduction and community services. Opposition by the community and health care workers to this narrow approach has been significant but ignored by the government. The resulting effect on health care workers and those at risk of harm via the poison drug supply has been monumental. Providing Alberta's health care workers with fewer tools cannot result in a better outcome.

This study gauges how the drug poisoning crisis is impacting frontline health care workers, their personal wellbeing, and their ability to provide care.

Previous studies have explored the experiences of doctors and nurses dealing with the opioid drug crisis, but there has been limited research into the experiences of other health care professionals. Our study focuses on Alberta health care workers who are part of the Health Sciences Association of Alberta (HSAA). In this study we asked the following questions:

- What has been the personal impact of the drug poisoning crisis for health care professionals in Alberta in HSAA?
- How has the workload and nature of work changed for HSAA members because of the drug poisoning crisis?
- What workplace supports do HSAA members need to continue working during the drug poisoning crisis?

The impact on HSAA workers varied, with those working at street level (paramedics, emergency department, in-patient, and specialty department staff) being the most affected by the poison drug crisis. Our results show that participants reported lower levels of knowledge and confidence to intervene during a drug poisoning crisis, despite the high frequency of drug poisonings they encounter in their daily work. Many health care professionals lack equipment and treatment options to support clients. Participants in our study are expected to do more with less as they face rationing of staff, equipment, space, and resources

in order to reduce costs. Health care professionals also faced workplace violence, which they felt was not taken seriously by their managers.

Respondents reported burnout, staff retention issues, and secondary traumatic stress. Burnout was a notable problem among this study's participants, especially among emergency professionals. Exhaustion impacts the day-to-day experiences of frontline health workers. Unaddressed professional quality of life issues can lead to people leaving their jobs altogether, leading to increased strain on the health care workers who stay. These factors all have the potential to affect all Albertans needing health care.

The Covid-19 pandemic and policies around its management have had a profound impact on the drug crisis in Alberta. One health care worker notes, "I would say Covid has magnified it (the drug crisis) astronomically…the stresses of Covid produced a lot of financial stress and depression, emotional anxiety. And I think people turn to drugs to deal with a lot of that. And sadly, I think that's when we saw a huge spike in a lot of cases."

Effective services that were closed during the Covid-19 crisis have not been restored. Health care workers interviewed report not being allowed to provide clients with clean needles or other supplies that would greatly improve a client's ability to mitigate harmful outcomes.

Participants also pointed out that societal issues are also exacerbating the drug crisis and could be reduced by effective governmental intervention. One participant said, "We have to try and house people." The lack of housing is a barrier for many people in accessing evidence-based addiction treatments in their communities.

Participants don't feel that the provincial government listens to or addresses their concerns. Study participants are clear that governmental policies have worsened the drug poisoning crisis. Effective services that were closed during the Covid-19 crisis have not been restored. Health care workers interviewed report not being allowed to provide clients with clean needles or other supplies that would greatly improve a client's ability to mitigate harmful outcomes.

Adherence to a singular approach in terms of the drug toxicity crisis is exacting a toll in terms of both frontline heath care workers' quality of life and loss of life when it comes to those directly affected by the poison drug supply. HSAA members face an uphill battle when there isn't trust in the systems that are supposed to support them.

If Alberta is to deal with this crisis effectively, health care workers need to have the proper support and tools. Education, training, governmental and managerial support, and policy based on the best available evidence are imperative, especially in rural areas.

Recommendations

Based on the results of this study, we recommend the following action items:

The Government of Alberta and Alberta Health/Recovery Alberta

- Address the drug poisoning crisis through evidence-based policies.
- Address system resource deficits in the Alberta health care and provide additional funds for improved staffing.
- Offer comprehensive counselling, mental health, and pharmacare programs to all Albertans to mitigate severe mental health difficulties.
- Support for harm reduction services. Supervised and safe consumption sites (including smoking as well as injection and oral consumption) and overdose prevention sites will reduce the volume of clients needing emergency health care services, reduce emergency wait times, and potentially decrease the risk of workplace violence faced by frontline health care workers. This support could potentially also reduce the number of fatalities among drug users.
- Provide comprehensive resources to people who use drugs: housing, treatment options that aren't exclusively abstinence-based, income support, and access to mental health and addiction services.

Alberta Health Services

- Offer more flexibility in scheduling and work roles without a reduction in benefits, pay, or pension.
- Offer more training, education, and resources for clinical managers to ensure health care workers have support and strong leadership.
- Provide paid education and training regarding drug poisoning, harm reduction, trauma-informed care, and addiction treatment to all heath care professionals.
- Offer greater funding for counselling and mental health support for health care workers, recognizing the need for external services.
- Create 24/7 accessible debriefing and crisis counselling systems for all health care workers.
- Introduce Connect Care in emergency medical services.
- Empower health care professionals to make changes to their health care services to address issues specific to their local area, especially in rural areas.
- Reduce workplace violence by creating health care services that are designed to meet clients' needs in a supportive environment.

The Public

Albertans can call on elected representatives and policy makers to implement evidence-based, adequately resourced health care services that are compassionate and effective, by:

- Writing MLAs and cabinet ministers to increase funding for health care professionals and expand access to safe consumption/overdose prevention sites.
- Challenging legislation and governmental policies that go against available evidence and which demonstrate potential to cause harm.
- Challenging societal stigma about addiction and mental health issues. Reducing the stigma faced by people who use drugs may result in more compassionate and effective care and reduce moral injury to care providers.
- Support job action by health care professionals.
- Bringing the issues illustrated in this report to the ballot box.

BACKGROUND

There have been unprecedented drug poisoning deaths in Alberta[1], and Canada[2] since 2020. There has been a change in the work of health care professionals across Canada to try and respond to the crisis, with increased pressure on our health care systems[1,2]. The following sections provide context for this report, outlining the consequences of drug poisonings in the policy landscape in Alberta.

Status of the Drug Poisoning Crisis in Alberta

The drug poisoning crisis has had widespread impact across Canada, with 20 people dying per day in 2024[2]. There have also been major impacts on Canadian health care systems, with 67 emergency department and 99 emergency medical responses per day[2]. In Alberta, there have been 10,185 recorded deaths since 2016[2]. There has been a downward trend in drug poisoning deaths in Alberta in 2024; however, this trend is seen across North America[3] and annual death rates in 2024 remain higher than 2016-2019[1].

In Alberta, there have been 10,185 recorded deaths since 2016.

It is challenging to determine what drugs are being consumed in Alberta, as there are widespread variations in substances and additives in the context of an unregulated drug market. In Alberta in 2024, there were 1,053 confirmed drug poisoning deaths, with 94% involving fentanyl and 65% involving methamphetamine[1]. There were some variations across the province, but in each region, fentanyl was involved in >90% of drug poisoning deaths, and methamphetamine from 56-75% of deaths[1]. While other substances, like cocaine, were identified, the vast majority of deaths in Alberta in 2024 were associated fentanyl and methamphetamine, in both the general population[1] and among Indigenous populations[4].

Current Policy Landscape in Alberta

These policies are authored to paint drug use as harmful for people and communities and that the government should respond to addiction with carceral practices, like involuntary admittance to inpatient treatment.

The Government of Alberta, through both Alberta Health and Addiction and Mental Health ministries, have advocated a policy of recovery, "including an individual's consistent pursuit of abstinence"[5]. The guiding documents for these policies include an impact assessment of supervised consumption services[6], the Alberta recovery model[5], Compassionate Care legislation[7], and other interim reports (see https://www.alberta.ca/alberta-opioid-crisis-response). These policies are authored to paint drug use as harmful for people[5] and communities[6] and that the government should respond to addiction with carceral practices, like involuntary admittance to inpatient treatment[7]. While these policy documents state that the government recognizes that "services to reduce harm are important in the overall continuum of care"[5], there have been repeated attempts

to close harm reduction services across Alberta[8,9]. The Government of Alberta has attributed a decrease in drug poisoning deaths to their recovery policies[10], despite the fact that this trend has been observed across North America, in a variety of policy environments[3]. Overall, the recovery policy approach decreases the treatment options available to Albertans by prioritizing inpatient treatment as the main addiction treatment option. In turn, there are increased pressures on and limits to access for harm reduction services, which do not fit the recovery policy approach. Inpatient treatment is also the most costly and resource-intensive means of providing addiction health care, with community-based options like supervised consumption sites being substantially cheaper[11].

Practice Implications for Alberta

The policies in Alberta relating to drug poisonings have communicated a clear vision for the future of addiction treatment in the province[5]. However, this vision has not resulted in changes in the frequency of emergency department visits and hospitalizations relating to substance use in Alberta[1]. There are data available about the impacts of this crisis for Albertans who experience drug poisoning[1,4], but there is little known about the consequences of this crisis for health care workers in Alberta. In this report, we present research where we investigated the impact of the drug poisoning crisis for health care professionals in Alberta.

WHAT WE ALREADY KNOW ABOUT DRUG POISONINGS AND THEIR IMPACT ON HEALTH CARE PROFESSIONALS FROM OTHER AREAS

We began our study with a literature review on the personal and workplace outcomes of the drug poisoning crisis for health care professionals. While we focused on the professions included in the HSAA (see Glossary), we also considered research with nurses, physicians, and other professions that would work in proximity to HSAA members. We conducted a comprehensive search of five databases: APA PsycInfo, CINAHL Plus with Full Text, MEDLINE (R) ALL, Ovid Healthstar, and Web of Science, from 1995-2025. A detailed accounting of our search strategy and inclusion/exclusion criteria are available upon request.

Included Literature

We retrieved a total of 35 articles for our literature review. These health care providers included in these studies were clinical care coordinators (n=1), counsellors (n=5), nurses (n=7), paramedics (n=8), pharmacists (n=4), pharmacy technicians (n=2), physical therapists (n=1), physicians (n=13), physician assistants (n=2), social workers (n=2), and speech-language pathologists (n=1). Most studies were from the U.S. (n=30), with a small number from Australia (n=1), Canada (n=3), and France (n=1). A table presenting our data extraction from these studies is available as Appendix A.

Literature Review

There was a consensus among these authors that the drug poisoning crisis has gotten worse over time. These authors reported that health care professionals were broadly and negatively impacted by the drug poisoning crisis. Clinical care coordinators, counselors, nurses, paramedics, physicians, and social workers reported an increase in clients who had experienced drug poisonings or sought addiction health care as a result of the crisis[12–17]. Health care professionals also experienced challenges with the increased complexity and time needed to care for each client with addictions[18–26]. These authors have all indicated that increases in workload were common among many of the health care professionals.

Maintaining staffing during the drug poisoning crisis was a consistent issue. Health care professionals reported that they did not have enough staffing to meet the needs of patients during the opioid crisis[12,16,18,20,24,27]. Clinical care coordinators, counselors, nurses, pharmacists, physician assistants, physicians, and social workers also struggled with not having enough support from other health care professionals to effectively care for clients[12,20,22,28–31]. Health care professionals also reported that they did not have the needed equipment or treatment options available to support clients[16,17,25,32].

Many health care professionals experienced burnout during the drug poisoning crisis[14–18,21,25,28,31,33–37]. A feeling of helplessness was also caused by being unable to treat clients effectively and prevent future drug poisonings[14,15,17,21,25,34–36]. Many health care professionals also experienced violence from clients and people trying to access opioids from pharmacies without a prescription[15,16,19,21,28,30,32,38]. There has been a broad, negative effect on health care professionals' wellbeing during the drug poisoning crisis.

Health care professionals also demonstrated resilience, with positive intrinsic attitudes in their practices, such as hope for improvements, empathy or compassion towards patients, responsibility for care outcomes, and personal fulfillment[12,14,16,17,20,22,36,38–41]. Professional support was another adaptive response to the effects of the drug poisoning crisis. Counsellors, nurses, paramedics, pharmacy technicians, physicians, and speech language pathologists reported receiving support from their health care team members[13,18,21,22,24,32,34,37,39]. Health care professionals managed to mitigate some of the personal effects of the crisis and improve treatment for people with addictions[13,18,21,22,24,32,34,37,39]. In the absence of workplace supports however, health care professionals were unable to manage the significant adversity caused by the drug poisoning crisis. Consequences of this adversity included health care professionals' decreased job satisfaction, leaving roles involving clients with addictions, and transferring to different practice areas[16,18,20,22,26,32,36,42].

Remaining Gaps in Knowledge

The lack of Canadian studies created an incomplete picture of the challenges for Canadian health care professionals in addressing the drug poisoning crisis. Nurses, paramedics, and physicians had an abundance of literature exploring their experiences, but other professionals were largely excluded. We did not identify any studies from the Alberta context, and we aimed to fill this gap with our research.

RESEARCH QUESTIONS

In our study, we addressed the following research questions:

- What has been the personal impact of the drug poisoning crisis for health care professionals in Alberta in HSAA?
- How has the workload and nature of work changed for HSAA members because of the drug poisoning crisis?
- What workplace supports do HSAA members need to continue working during the drug poisoning crisis?

Research Methods

We conducted a sequential mixed-methods study about the experiences of HSAA member health care professionals of their work during the drug poisoning crisis in Alberta. Our study consisted of a survey, followed by qualitative interviews. We sent a survey link to all HSAA members in August and September, inviting them to participate in the study. Participants could complete an online survey about their working experiences during the drug poisoning crisis. We asked people who completed the survey if they would be willing to speak to us in an interview, to gain more understanding about their experiences. We conducted interviews in the fall of 2024. Our study received full ethical approval from the Conjoint Health Research Ethics Board at the University of Calgary, approval number REB24-0982. All participants provided informed consent to be part of this research.

We sent surveys to all HSAA members via email, inviting them to participate, with two follow up reminders. There are approximately 29,000 HSAA members, although there are members who would be on leave or other circumstances where they would not be working at this time. Thus, it is difficult to say exactly how many of these members were available for the study. The surveys included questions about participants' demographic backgrounds, their knowledge of opioid drug poisonings[43], attitudes responding to a drug poisoning[43], their professional quality of life[44,45], and violence at work [46]. The details of the survey are presented in Appendix B: Survey instruments.

In the qualitative interviews, we spoke to participants across the province via Zoom. All interview participants were recruited from the prior survey, where participants provided their email address if they would be willing to complete an interview. We asked people to tell us about how their work may or may not have been affected by the drug poisoning crisis (see Appendix C). We used the features in Zoom to transcribe these interviews, verified each transcript by hand, and used NVivo v. 14 as our data management software.

Our data analysis approach for the qualitative interviews was reflexive thematic analysis[47]. Using this approach, researchers develop themes using a systematic process of reading and coding qualitative data[47]. We used reflexive thematic analysis to create a shared meaning from the individual experiences of our participants, while being mindful of our own experiences and views that influenced our analysis process[47]. We read the interviews to identify main ideas from each participant individually, then looked at how these main ideas fit with the experiences of others. Throughout the data analysis process, we wrote notes about our coding and had regular debriefing discussions with the research team to talk about the findings[48]. We bring together our results from the surveys and our findings from the qualitative interviews in the following sections.

RESULTS - PARTICIPANTS

In total, 534 participants responded to the survey, with 69% (n=374) reporting that they have been affected by the opioid and drug poisoning crisis. 80 of the 534 people answered, "not sure", and 80 of the 534 people responded "no" and were prompted to the end of the survey and did not complete additional questions. 454 participants ("yes" and "not sure" respondents of the 534) completed the whole survey. The demographic information for survey participants is presented in Table 1.

Table 1: Survey participant demographic and work characteristics (n=454)

CHARACTERISTIC	FREQUENCY N (%)
PROFESSION	
Emergency	104 (23%)
Mental health	84 (19%)
Health care technologist/specialists	104 (23%)
Rehabilitation	29 (6%)
No response/unknown	133 (29%)
GENDER	
Cisgender male	103 (23%)
Cisgender female	312 (69%)
Non-binary	6 (1%)
Transgender	4 (<1%)
Two-spirit	26 (5%)
No response/unknown/in another way	3 (<1%)
RACE	
White/European	377 (83%)
Indigenous (Inuit, First Nations, or Metis)	14 (3%)
East/Southeast Asian	26 (6%)
*Other	36 (8%)
MARITAL STATUS	
Single	83 (18%)
Married	233 (51%)
Divorced/Separated/ Widowed	74 (16%)
Common-law	27 (6%)
In a relationship	37 (8%)

AGE (years)	
18-30	82 (18%)
31-45	247 (54%)
46-60	
No response	108 (24%)
17 (4%)	
ZONE	
Calgary	162 (36%)
Edmonton	151 (33%)
Central	43 (9%)
North	52 (11%)
South	
No response	45 (10%)
1 (<1%)	
EMPLOYMENT TYPE	
Full time	311 (69%)
Part time	108 (24%)
Casual	34 (7%)
No response	1 (<1%)
YEARS WORKED	
<1	12 (3%)
1-5	88 (19%)
6-10	86 (19%)
11-20	164 (36%)
WORK HOURS	
Day shift	180 (40%)
Night shift	12 (3%)
Both day and night shift	190 (42%)
9-5 working hours	72 (16%)
CLIENTS WITH DRUG POISONING IN THE LAST 30 DAYS	
<5	305 (67%)
5-10	82 (18%)
11-20	31 (7%)
>20	33 (7%)
No response	3 (1%)
ADMINISTERS NALAXONE AT WORK	
No	235 (52%)
Yes	208 (46%)
Unsure	11 (2%)

* Participants that reported their race as Latin American, Arab/West Asian, South Asian, and Black or African American were included in the "other" due to their low numbers to protect their identities.

HSAA contains many professional groups, and we created sub-categories of professions to facilitate our analysis. A breakdown of how we grouped the health care professions of survey participants is in Table 2 below.

Table 2: Professional groupings for HSAA registered designations who participated in the survey

Emergency professionals	Paramedic (Advanced/Primary) Emergency Communications
Mental health professionals	Psychologist Mental Health Therapist Addiction/Family Counselors Clinical Behavioural Specialist Social Worker Psychometrist Psychiatric Registered Nurse** Registered Nurse Mental Health Therapist**
Health care technologist/ specialist/ Pharmaceutical professionals	Cardiology Technologist Laboratory Technologist/Assistant Combined Laboratory X-Ray Technologist Medical Radiation Technologist Electroencephalogram Technologist Electroneurophysiology Technologist Computed Tomography Technologist Medical Laboratory Technologist /Assistant Medical Photographer Respiratory Therapist Dietitian Sonographer Tissue Specialist Pharmacist Pharmacy Technologist Registered Nurse/Licenced Practical Nurse**
Rehabilitation professionals	Occupational therapist (OT)/Assistant Physiotherapist (PT) Recreation Therapists Speech-Language Pathologists (SLP)/Assistant Rehabilitation Practitioner Therapy Assistant

*The following professions were removed from analysis due to insufficient sample size for grouping (n=9): Administrative staff, Analyst/Researcher, Clinical Educator, Clinical Information Resource Specialist (poison), Clinical Supervisor, Public Health Inspector, Coding Specialist, Education Consultant, and Health Information Manager.

**Most nursing professionals are members of the United Nurses of Alberta, but some nurses qualify for HSAA membership instead, based on their practice setting and role professions were grouped into one of the four categories: emergency professionals, mental health professionals, health care technologist/ specialist/pharmaceutical professionals, and rehabilitation professionals.

In our survey, emergency and health care technologist/specialists had the highest frequency of participants (23% each) followed by mental health professionals (19%) and rehabilitation professionals (6%). Twenty-nine percent of participants did not report their profession.

In our qualitative interviews, we spoke with 16 health care professionals, for about 45 minutes each. We spoke with people from a variety of professional backgrounds and work environments (illustrated in Table 3).

Table 3: Demographic characteristics of interview participants

CHARACTERISTIC	FREQUENCY N (%)
Profession	
Addiction Counsellor	3 (19%)
Medical Laboratory Assistant	2 (13%)
Paramedic	5 (31%)
Pharmacist	1 (6%)
Respiratory Therapist	1 (6%)
Social Worker	3 (19%)
Speech Language Pathologist	1 (6%)
Gender	
Female	10 (63%)
Male	6 (38%)
Employment Length	
3 Years or less	5 (31%)
4-10 years	6 (38%)
11+ years	5 (31%)

RESULTS - OUTCOMES FOR HSAA MEMBERS

In the following sections, we present our results from the survey and our interview findings grouped together, organized by the major themes that we found in these data. We present the context for these results, the lack of knowledge and education around drug poisonings, incidents of workplace violence harming clients and participants, personal consequences for participants, and recommendations from participants to make things better.

The Experiences of Health Care Professionals in the Drug Poisoning Crisis in Alberta are Influenced by Their Context

There are numerous contextual factors that influenced the experiences of health care professionals who work with clients that experience drug poisonings. Interview participants agreed unanimously that drug poisonings were a major problem in all areas of Alberta. Addressing drug poisonings comprised a significant part of their daily work. A participant, who worked across several clinical areas, discussed the ubiquity of drug poisonings:

> *And just us seeing the number of cases go up in the last few years as well. It's everywhere from the code room, where patients are completely comatose and unconscious from a drug overdose, people who have [been] arrested, to people who just come in because they're overly sedated or withdrawing. We see that every single day, and so I would say it's definitely affected my job (P04).*

Interview participants agreed unanimously that drug poisonings were a major problem in all areas of Alberta.

This participant highlighted how clients could be at varying stages of dealing with a drug poisoning or addiction and need access to the health care system. This understanding was coupled with the acknowledgement that while the problem had increased, the number of staff, services, and facilities had remained fixed. One participant talked about the impact for a small, rural hospital:

> *[Name] hospital is one of the busiest hospitals in the zone. We are actually very small- it's a primary care hospital but we are really, really busy. Our emergency is always full. So, what happens, especially during the winter - sometimes the wait times can last from 6 to 8 h or 4 h to 8 h. Yeah, that's the case, because we have so many patients coming in and not all patients a have primary physician (P06).*

This participant discussed how the smaller facility was under resourced in both beds and clinical staff, and that they were overwhelmed by increases in drug poisonings.

Participants were also unanimous that the drug poisoning crisis related to COVID-19. They reported that the crises had occurred in tandem, complicating their daily work.

> *I would say Covid has magnified it astronomically […] And I think that when people were isolated and they had nothing else to do, you get the kids who are just partying and trying something for the first time. But then you also get the hard users who are really using a lot more. And I think the stresses of Covid produced a lot of financial stress and depression, emotional anxiety. And I think people turn to drugs to deal with a lot of that. And sadly, I think that's when we saw a huge spike in a lot of cases (P04).*

Participants explained that COVID-19 and the drug poisoning crisis had synergistic effects, increasing isolation among clients, decreasing access to services, and creating financial problems. These conditions resulted in an environment where people who were managing started to struggle, and people who were struggling tipped into crisis.

Participants reported that drug use was not the same across the province, with participants recognizing that while fentanyl was major issue, there were regional complexities. This participant discussed the local nuances of the drug supply in their rural area:

> *A lot of meth withdrawals or meth-use psychosis, that kind of thing. And to be fair, we do see quite a few opiate overdoses. It's just not as extreme as some other places, because, for whatever reason, the drug culture just doesn't - the opiates just don't exist in quantity here (P13).*

Participants reported that the drug supply was influenced by proximity to the USA border and how rural their area was. These factors meant that the crisis existed across the province, but local areas can have distinct challenges. Therefore, participants' experiences of the drug poisoning crisis were influenced by their location and drug supply in their work areas.

Participants also highlighted the social problems that contribute to the drug poisoning crisis. First among these problems was housing. There was a consensus that a lack of housing was compounding the drug poisoning crisis. This participant elaborated:

> *We have to try and house people. Well, it's impossible to house people when they're on a fixed income because housing is so expensive. So then it comes, all that frustration builds up. And then, oh, we need to do more. I don't know what else we can do. I don't control the housing market (P05).*

The cost of housing represented an insurmountable barrier for clients, which compounded their difficulties.

The participant explained that they recognized the need for clients to have housing but could not overcome the systemic barriers related to cost. In turn, the participant felt helpless because they were pressured to get people off the street, but there were no appropriate homes available for clients. The cost of housing represented an insurmountable barrier for clients, which compounded their difficulties.

Participants reported that policies implemented by the provincial government had worsened the drug poisoning crisis. Mental health services were closed during Covid-19 and never restored. Participants also reported that they were not allowed to provide clients with new needles or other supplies like pipes, despite a clear need. This participant reported that her work would not improve without political intervention:

> *My day isn't going to get better until the Alberta Government sorts out the f*cking income support system, and then until they make investments in the health of people in this province, and until they start putting money towards things that are actually going to help people and start making it possible for us to build affordable housing (P12).*

This participant recognized that she could not address clients' real issues until systemic problems were addressed. None of our participants verbalized optimism that the current abstinence-based plan for care would be successful or address the current crisis.

There were also universal concerns of asking to be doing more with less. Participants reported rationing of staff, equipment, space, and other resources to try and reduce costs. These changes resulted in poorer client care. One participant described the micromanaging they faced at work:

> *Our butterflies [needles] are like our secret currency in the lab. It's your most prized possession is your butterfly needle, because we only get 4 per shift. … That's management's way of keeping costs low because butterfly needles are more expensive (P09).*

This example illustrated how broad cost pressures are downloaded onto health care professionals. Chronic under resourcing of the health care system was evident at the individual level when participants had to adapt their work to things like rationed equipment.

Outcomes for health care professionals were also influenced by their geographic position in the health care system. It was broadly recognized that the drug poisoning crisis was most acute at street level, where people who used drugs and experienced homelessness were present. A lack of affordable housing meant that clients occupied a liminal space on streets, outside of fixed addresses. Participants experienced more exposure to the drug poisoning crisis the closer they worked to street level health care services. For example, a paramedic had to address the crisis more than someone in the emergency department, who addressed the crisis more than someone in intensive care, and so forth. A participant reported their experiences of working on an outreach team:

> *We have a nurse that goes on their [outreach] walks with them, too. And there's constantly people that are dropping. And it's more immensely taxing on us (P05).*

This finding is important because health care professionals experienced relative degrees of exposure to the drug poisoning crisis, which could influence their exposure to traumatic events like client deaths. Participants recognized their relative levels of exposure:

> *I'm fortunate compared to a lot of maybe my other allied health colleagues who might work in the community, is that the policy I have to follow [if someone needs naloxone] is that I contact the nursing staff and the health care staff, and they have all the equipment (P08).*

The need for supports for health care professionals who work with clients experiencing drug poisonings could be considered relative to their proximity to the street level, and thus, their potential exposure to trauma. While support needs to be available for all health care professionals in Alberta, our participants indicated that proximity to clients at street level influenced their need for support.

In addition to these contextual factors, we found specific issues among health care professionals in Alberta. These include a lack of knowledge about drug poisonings, facing significant violence, and experiencing high levels of burnout. Each of these issues is addressed in the following sections.

HEALTHCARE PROFESSIONALS LACK KNOWLEDGE ABOUT RESPONDING TO DRUG POISONINGS

We assessed how much participants know about responding to drug poisonings (Table 4). On a knowledge test about opioids (scored out of 45), the mean scores were 21.55-25.75, indicating a moderate level of knowledge. Participants' competency to manage an overdose score averaged at 24/50. In the section on readiness to respond to an overdose, the average score among groups was 23/50. These scores indicate low to moderate levels suggesting improvements for confidence and preparedness across professions is needed when responding to an overdose.

Table 4: Summary of Scores by Profession for the Opioid Overdose Knowledge Scale (OOKS) and Opioid Overdose Attitudes Scale (OOAS)

PROFESSION	OOKS (Mean, SE) /45	OOAS: Competency to Manage an Overdose (Mean, SE) /50	OOAS: Concerns About Managing an Overdose (Mean, SE) /40	OOAS: Readiness to Intervene in an Overdose (Mean, SE) /50
Mental Health	25.75 (0.33)	24.00 (0.41)	29.07 (0.41)	20.21 (0.34)
Emergency	25.21 (0.35)	21.66 (0.24)	33.24 (0.39)	25.63 (0.49)
Health Care Technologist/ Specialists	23.53 (0.42)	26.06 (0.46)	27.23 (0.47)	23.20 (0.48)
Rehabilitation	21.55 (0.78)	26.58 (0.78)	26.52 (0.77)	21.72 (0.53)

When we asked participants about their education around drug poisonings and managing overdoses, they reported there had been little training available:

> *I've kind of watched the opiate crisis unfold. It moved a little faster than the employer could even offer training … I'd say that we got trained on how to use a naloxone kit and even got naloxone kits like quite late in the game at our site. I don't recall much training, just how to reverse an overdose (P14).*

We asked participants if they wanted more education on drug poisonings and drug use and some indicated that the lack of training was symptomatic of a bigger problem. This participant reported that they had been unable to access education programs or time off:

> *Within the last year I just stopped asking. I've previously said, "Hey? I've put in request for extra training on certain things. I've put in request for extra time to learn or to have access to stuff," we're always get kind of get the same responses, it's, "We don't - there's no time, because you have to go do this job." So, you just stop asking (P10).*

This participant perceived that they did not have support from their managers, and so they stopped asking for opportunities to build their knowledge base. A lack of options or support may be part of the reason for relatively low scores on drug poisoning reversal.

HEALTH CARE PROFESSIONALS ARE FACING SUBSTANTIAL WORKPLACE VIOLENCE

We used the Workplace Violence Survey (WVS)[49] to assess whether participants had encountered any types of workplace violence from patients or patients' relatives/friends in the past year[50]. WVS assesses experiences of physical violence, different types of verbal abuse, bullying, sexual harassment, and feelings of safety at work[50]. We found that health care professionals reported high rates of emotional abuse, and moderate rates of threats and feeling unsafe (Table 5). In this context, emotional abuse was defined as the mistreatment to the professional through words (i.e. being disrespectful and using curse words).

Table 5: The WVS frequencies by each category and frequency of incidents in the past year

CATEGORY	0 times (n, %)	1 time (n, %)	2-3 times (n, %)	>3 times (n, %)
Physical abuse	246 (54.55%)	66 (14.63%)	70 (15.52%)	69 (15.30%)
Emotional abuse	73 (16.22%)	42 (9.11%)	112 (24.67%)	225 (50%)
Threats	159 (34.81%)	70 (15.52%)	94 (20.84%)	130 (28.82%)
Verbal sexual harassment	246 (54.22%)	74 (16.44%)	61 (13.56%)	71 (15.78%)
Sexual abuse	376 (83.30%)	40 (8.91%)	19 (4.23%)	16 (3.56%)
Felt unsafe at work	175 (38.58%)	75 (16.41%)	109 (24.17%)	94 (20.84%)
Sought help	378 (83.93%)	24 (5.36%)	25 (5.58%)	23 (5.13%)

Paramedic participants recognized that when clients experienced drug poisonings, they may be in an alley or other public space, due to a lack of supervised consumption sites. Clients could wake up to someone providing medical interventions to them, which would understandably be frightening. However, professionals like paramedics were there to resuscitate someone in an unsupported environment, possibly working alone. Participants recognized that this situation was problematic for both health care professionals and clients, with both feeling unsupported.

Participants of all genders reported similar levels of workplace violence. Participants reported that workplace violence came from clients, other health care professionals, and members of the public. Participants attributed the increased workplace violence directed toward emergency professionals to risks outside of the hospital. When we asked a participant if they ever felt unsafe at work, they replied:

> *Yeah, all the time. So, you always have to be aware of your surroundings and what's going on. Your safety isn't just violence, your safety is used needles, weapons, all that sort of stuff. So, I've been in many, many drug houses for many, many people that have overdosed with needles all over the floor, whether they're needles from being given Narcan by their friends, or needles from injecting medications. Houses with knives and swords and guns and all that kind of stuff around you, and then there's the violence piece where you wake somebody up and they're pissed off that you've taken their high away, and they can get violent or threaten violence or what have you. So, we're the only health care professional that wears bulletproof vests for a reason (P15).*

Despite these reports, very few survey respondents indicated that they sought help to address these issues (Table 5). In the qualitative interviews, some participants reported that they did not trust the support that was offered to them:

> *We have no support, right? Like, EMS does not have a therapist. We do not have a critical incident stress debrief team. We have peers, like, I can be on the peer team to help my paramedic colleagues out. But I'm not a professional, I'm not trained, I'm not licensed and registered. We need monthly check-ins; we need a therapy team that's there and available on call at least 24/7 for when we go to these crises (P16).*

Some participants reported that they also avoided their employee assistance program because they feared that their employer would use their participation against them, and that there were no counsellors who specialized in debriefing, post-traumatic stress, or the issues faced by health care professionals.

HEALTH CARE PROFESSIONALS FACE CONSEQUENCES OF WORKING DURING THE DRUG POISONING CRISIS

The factors above have created difficult environments for health care professionals in Alberta as they respond to the drug poisoning crisis. We asked in our survey and interviews how participants were doing. We used the Professional Quality of Life Scale (ProQOL), which measures the subscales of compassion satisfaction, burnout, and secondary traumatic stress. We present participant scores in Table 6.

Table 6: Summary of Scores by Profession for the ProQOL

PROFESSION	Compassion Satisfaction (Mean, SE) /50	Burnout (Mean, SE) /50	Secondary Traumatic Stress (Mean, SE) /50
Mental Health	39.57 (0.69)	23.65 (0.66)	22.60 (0.73)
Emergency	35.12 (0.67)	27.27 (0.60)	25.04 (0.72)
Health Care Technologist/ Specialist	36.10 (0.56)	26.31 (0.54)	24.23 (0.62)
Rehabilitation	38.10 (1.13)	25.14 (1.12)	24.14 (1.10)

Overall, we found that the average score for the ProQOL subscale on compassion satisfaction for all participants was 37/50, indicating high job satisfaction and feelings of making a positive contribution through one's work. The average participant score for the burnout subscale across all professions was 26/50, indicating moderate burnout in the workplace. The average participant score for secondary traumatic stress was 24/50 indicating moderate levels of stress across all professions. Combined, these scales show an overall positive result, with higher job satisfaction and lower burnout and secondary traumatic stress.

However, in our interviews, participants reported that burnout was endemic among Albertan health care professionals.

However, in our interviews, participants reported that burnout was endemic among Albertan health care professionals. Participants reported that either they experienced burnout, or they worked with people who did. This participant could recognize burnout in her practice:

> *Yes, there's definitely times where I know that the professional I want to be wants to go see this person and do more for them than I have. But then I also have made the decision that I'm not doing that today, because I just can't. Which is then, on the one hand, I feel good about, because I know I'm setting up my own boundaries, and, on the other hand, I feel terrible about, because that's not the type of professional I want to be (P01).*

This participant felt conflicted because they recognized that clients experienced a high level of vulnerability, but that they could not sacrifice their own wellbeing to support clients. There was a broad agreement that the drug poisoning crisis had been hard on health care professionals, due to increased client needs and the increased suffering among clients.

Notably, among all professional groups, emergency professionals had the lowest compassion satisfaction and highest burnout and secondary traumatic stress in the workplace. This result means that emergency professionals had the lowest job satisfaction and the highest negative consequences of their work. Emergency professionals reported that many structural elements made them feel like their work was not valued. This participant discussed how emergency professionals were excluded from province-wide electronic medical records:

> *We continue to fight for frontline to have access to Connect Care [electronic medical record], and that's an ongoing fight that we're not getting anywhere quick. I'll admit it was really frustrating. Launch 9 of Connect Care just happened earlier this month, and the organization, as a whole, got an email saying, "It was the final launch. Everybody's finally on connect care. Everybody has access," and EMS is sitting over here saying, "Hello. We're part of AHS, and we don't have access to Connect Care. What do you mean you're all done?" (P15).*

The lack of access to Connect Care made emergency professionals feel like they were not "part of the team" and that their work was not valued or appreciated by other people in the health care system. Issues with managers, exclusion from hospitals, and an ongoing staffing shortage all added to the burnout among emergency professionals. The ProQOL scores for emergency professionals were the lowest across all subscales, indicating that emergency professionals are struggling more than their counterparts.

THERE ARE OPTIONS TO MAKE THINGS BETTER

In addition to these challenges, participants reported multiple ways that structural supports could be implemented to improve working conditions. Participants recommended concrete steps to support clients and people in the community, recognizing that unless people with addictions got more support, there would not be any change in demand for services.

> *I mean, we try our best to keep everybody alive, but you know, if there's a toxic drug supply, you never know who's gonna go down (P07).*

This participant highlighted that as long as the drug supply was not regulated or reliable, clients would continue to face the drug poisoning crisis. There was a strong sentiment among participants that the provincial government policies around addiction needed to change, but that it was futile to expect any changes. However, participants did make suggestions on intermediate measures that could support health care professionals in Alberta, which included suggestions for their immediate workplaces. These suggestions are detailed in the following sections.

Local Strategies and Ability to Innovate

Participants reported that they had less burnout when they had the capability to make changes at their workplace. These changes provided health care professionals with both the opportunity to adapt to local issues and avoid feelings of helplessness. One participant discussed how participating in a department working group had helped to create changes that benefitted clients and health care professionals:

> *Yes, so I have been invited to be part of a [department working group on opioids]. And it's a super great committee that, I feel like I was doing something useful with your frustration. This committee is really, is a practical way to sort of deal with it … I have the space, and I have the ability to share how I'm feeling about a situation or some of my frustrations. It's shared. It's a shared frustration. And so, it's easy to kind of talk about it with your colleagues and then, when you see something practical like the committee being done and created to manage some of [the issues]. It feels like, okay, we're actually also dealing with it in a way (P04).*

The participant reported that this group was effective because they had real power to implement new strategies in their department, and it was led by health care professionals who worked with clients daily. Providing groups with resources and autonomy to make local-level changes has the potential to improve client care and mitigate some of health care professionals' burnout.

Comprehensive Benefits

Participants recognized the need for increased benefits coverage, especially relating to counselling. Participants preferred to access counsellors independently, rather than utilize the employee assistance program. Services offered by the employer were viewed with concerns about confidentiality or whether the counsellors would be a fit. Counsellors outside the employer were a major source of support for participants. However, the coverage limitations for counselling prevented participants from getting the help they needed.

> *A lot of us have therapists that we talk to. That's one thing that we push, especially for people who are joining up. I go to a therapist every single week, which is - I never thought I'd be doing that as a kid or as somebody who's entering this industry, and I wasn't even warned about it, and I wasn't even told about it. You gotta spend a 3rd of your paycheck on therapy, because you know nobody else is gonna help you, right? And [the trauma] destroys yourself and destroys your relationships around you, but I think everybody I know has a therapist now that's been in this industry for more than five years (P16).*

Counselling was identified as a vital part of participants continuing in their roles. Increasing benefits coverage for counselling could promote staff retention and support health care professionals to continue working during the drug poisoning crisis.

Manager Skills and Support are Critical

Supportive managers were a critical part of health care professionals staying in their roles. Participants reported better outcomes when they were listened to, had their concerns taken seriously, and experienced empathy for the workplace difficulties of the drug poisoning crisis. This participant talked about the value of supportive management:

Participants reported better outcomes when they were listened to, had their concerns taken seriously, and experienced empathy for the workplace difficulties of the drug poisoning crisis.

> *I have worked for really good people like the management teams that I've had. The leadership teams have largely been quite good and supportive, and I value that for sure. My team right now is awesome, the leadership team is great. So that's the bonus. It's important to me for sure to have a good support like that and good mentorship (P12).*

Providing additional training and support to managers would mean that there are benefits for health care professionals, with relatively little expenditure. Targeting clinical managers with more resources could potentially impact workers widely across the health care system.

Conversely, managers with poor leadership skills or lower autonomy had a toxic effect on their employees. The importance of strong managers with adequate resources was recognized clearly by participants. This participant spoke about their lack of support:

> *Yeah, it's pretty horrible to be honest. A lot of the time, our management is very dismissive of our concerns. And our supervisors are dismissive of the concerns as well. For example, I told a story to one of the supervisors, and he said, the reason why we almost got in a fight is because we weren't smiling enough that day. I said, well, "You don't know what I was going through that day. You definitely don't know what the crew is going through on that day, and I don't think any amount of smiling would have stopped that gentleman from trying to physically hurt that young female paramedic, because he definitely could have if he wanted to." So, you know, it's just… our management is absolutely horrible and it's part of the cause of why EMS is treated so poorly, and why we don't get the support we need. And when we do try to report things like violence, and these issues with opioids, they are just turn a blind eye to the whole thing (P16).*

This quote illustrates clearly how a lack of manager support has detrimental effects for health care professionals. Factors like retention, job satisfaction, and employee wellbeing become more pronounced without genuine support from managers.

Flexibility Helps People Stay

Participants identified the street level as the center for the drug poisoning crisis, and the place that they could experience the most potential trauma. To manage their exposure to this trauma, some participants opted to work fewer hours in a street-level clinical space. This participant reported how health care professionals would use sick time to have a break if their schedule did not allow for flexibility:

> *I do see an increase in sick calls. But I don't know if that's secondary to burnout, or if it's just the way the culture is shifting to the workforce. I'm not sure, but that is something I've noticed (P02).*

Other participants decreased their work hours or changed their shift schedule to allow more days between shifts, so they had more time off for personal recovery. Strategies that help health care professionals have more flexibility, or take on multiple roles for fewer hours, may help to retain staff over the long term. Health care leaders can promote options that allow health care professionals to change jobs or have more than one role, and retain access to benefits, pensions, etc.

Informal Support and Grief Counselling

Participants recognized the importance of confidentiality for clients but found that the lack of closure could impair their ability to grieve client deaths. Not knowing what had happened to a client made it difficult for participants to process their experiences. For example, a participant talked about how clients leave their clinical area:

> *We never hear about that end of the after they're admitted. We help to wean them off the ventilator, and then they leave. And I'm just kind of curious as to what happens after that (P03).*

This participant discussed how it would help the health care team to know more about a client's journey to gain closure. Other participants wanted opportunities to debrief about a client with their colleagues, especially when clients died.

> *And then we do things, for example, for people who have passed. We do have little memory wall. So just trying to create that safe space where you can talk and debrief about [the client] and have that as an option (P08).*

These examples highlight the value of having some knowledge of a client's outcomes for a health care professional. Things like the memorial wall provided a way for health care professionals to remember clients after they died, acknowledging that the client mattered to the participants. There may be ways to protect client information and identities but provide limited follow up for health care professionals to help prevent burnout and provide grief support.

Health care professionals told us about how important it was for them to have support at work. Participants' preferred source of support was their colleagues. Participants reported that their colleagues understood their experiences and knew the clients.

> *What is going well with my daily work life? I enjoy the people that I work with. I enjoy patient interactions and making a difference (P11).*

Informal support provided an opportunity for participants to talk about their work with someone who shared their meaning. When asked about formal support, a participant illustrated how they preferred to connect with their colleagues:

> *It's more the connection with the other people in your office and the people that have experienced what you have gone through (P5).*

This participant explained that they did not need to explain the whole situation to a colleague; their shared understanding meant it was easier to privately debrief after a difficult moment. Participants could give and receive support readily, because of their shared context and understanding. This approach was preferred by health care professionals over speaking to someone outside their context.

Participants identified their colleagues as a strong factor that helped them in their daily work. However, a participant reported that their communication had been curtailed, because of concerns over client confidentiality. The lack of communication created a gap for this participant:

> *There's very little like communication in between team members allowed, [management has] shut down a lot of our- we used to have a team chat. Every morning, somebody would start like a text group or a chat group, so that, just even throughout the day, if you needed help with something or say you needed a question like, "Okay, I'm doing this lab work. And for the life of me I can't remember how to do this," right? And you would reach out and somebody would chime back and say, "Hi, no problem. You just do this," or "Hey, I'm not that far. I am free. I can come, help you." You know, there is a lot of that. They shut that down. So that was just after Covid they shut - they took that away from us. So, we're not allowed to communicate to our own team members ... But we're not allowed to talk to each other unless we're face to face, really. So, it's really frustrating (P10).*

The impression was that managers were more interested in following arbitrary rules than addressing the need for health care professionals to access clinical support from colleagues.

This participant felt that managers did not have valid reasons for implementing these changes. The outcome was that the participant felt that managers did not take concerns seriously or recognize the need for support from coworkers. The impression was that managers were more interested in following arbitrary rules than addressing the need for health care professionals to access clinical support from colleagues. Steps like these led participants to perceive that they were losing one of their few resources for their daily work. One option could be increasing access to Connect Care, to provide health care professionals with a secure way to connect, while protecting client confidentiality.

DISCUSSION

Our work is similar to other authors, in that we found increases in workload for health care professionals as they respond to the drug poisoning crisis[12–17]. The outcomes for health care professionals were the result of systemic barriers and a structural lack of resources, not a person's individual difficulty coping with the drug poisoning crisis. Participants felt they were blamed if they could not manage system-level problems on an individual basis. In particular, our report echoes the work of prior researchers in highlighting the issues with EMS in Alberta[51], and we found that workplace conditions have not improved since that prior work. Our report adds to the evidence that the drug poisoning crisis has had widespread impacts for workers in multiple sectors[52].

More supervised consumption sites are needed, to decrease the workload on emergency professionals who are responding to drug poisonings after the fact. Supervised consumption sites could potentially prevent some drug poisonings and divert clients from other emergency services.

The Government of Alberta, Alberta Health, and Alberta Health Services can improve conditions for health care professionals in Alberta. Their primary focus should be in providing resources to address the drug poisoning crisis and implementing systemic strategies to provide people with access to housing and treatment options. More supervised consumption sites are needed, to decrease the workload on emergency professionals who are responding to drug poisonings after the fact. Supervised consumption sites could potentially prevent some drug poisonings and divert clients from other emergency services. There is also a need to offer comprehensive counselling and pharmacare coverage so Albertans can access addiction treatment on their own terms.

In the interim, health care professionals can be supported to adapt their work at a local level to address the unique needs of their community. Additional training can be provided across the health care system about drug poisonings and intervention. Benefits, especially for counselling and psychological support, can be expanded. Managers can be offered additional training and resources to better help their colleagues. Job structures can allow for flexibility, so that health care professionals continue working in their clinical roles but mitigate burnout by having time off between shifts. Providing options for people to work reduced hours in more than one role and retain benefits and pension contributions could promote staff retention. More work to prevent and address workplace violence against health care professionals is urgently needed, such as expanding environments that prevent violence, supervised consumption sites, and community-based addiction services. Additionally, managers can enhance opportunities for health care professionals to support each other at work and obtain closure around client outcomes. Changes like these are required to support health care professionals as they address the ongoing drug poisoning crisis.

REFERENCES

1. Alberta Health. 2025. *Alberta substance use surveillance system*. https://healthanalytics.alberta.ca/SASVisualAnalytics/?reportUri=%2Freports%2Freports%2F1bbb695d-14b1-4346-b66e-d401a40f53e6&sectionIndex=0&sso_guest=true&reportViewOnly=true&reportContextBar=false&sas-welcome.

2. Government of Canada. 2025. *Opioid- and stimulant-related harms in Canada*. https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/.

3. Weiland, N. 2024. Drug overdose deaths are dropping. The reasons are not perfectly clear. *The New York Times*. https://www.nytimes.com/2024/09/21/us/politics/drug-overdose-deaths-decrease.html.

4. The Alberta First Nations Information Governance Centre. 2024. *Alberta opioid response surveillance report: First Nations people in Alberta*. https://open.alberta.ca/publications/alberta-opioid-response-surveillance-report-first-nations-peoples-2024.

5. Alberta Mental Health and Addictions Advisory Council. 2022. *Towards an Alberta model of wellness*. https://open.alberta.ca/publications/toward-an-alberta-model-of-wellness.

6. Alberta Health. 2020. *Impact: A socio-economic review of supervised consumption sites in Alberta*. 190. https://open.alberta.ca/dataset/dfd35cf7-9955-4d6b-a9c6-60d353ea87c3/resource/11815009-5243-4fe4-8884-11ffa1123631/download/health-socio-economic-review-supervised-consumption-sites.pdf.

7. Government of Alberta. 2025. *Compassionate intervention act*. https://docs.assembly.ab.ca/LADDAR_files/docs/bills/bill/legislature_31/session_1/20230530_bill-053.pdf.

8. Jeffrey, A. 2025. Alberta looking into shutting down supervised consumption site in Calgary: premier. https://www.cbc.ca/news/canada/calgary/smith-gondek-scs-chumir-1.7497204 *CBC News Calgary*.

9. Red Deer Advocate Staff. 2025. Court dismisses appeal for denied injunction to keep Red Deer OPS open. *Red Deer Advocate*. https://www.reddeeradvocate.com/local-news/court-dismisses-appeal-for-denied-injunction-to-keep-red-deer-ops-open-7968175.

10. Tran, C. 2024. Alberta sees downward trend in opioid-related deaths. *The Edmonton Journal* https://edmontonjournal.com/news/alberta-opioid-deaths-april-2024.

11. Filteau, M. R., Kim, F. L., & Green, B. 2022. "It's more than just a job to them": A qualitative examination of patient and provider perspectives on medication-assisted treatment for opioid use disorder. *Community Ment Health J* 58, 321–327. https://link.springer.com/article/10.1007/s10597-021-00824-7.

12. Beitel, M., et al. 2018. Experiences of burnout among drug counselors in a large opioid treatment program: A qualitative investigation. *Substance Abuse* 39, 211–217. https://journals.sagepub.com/doi/10.1080/08897077.2018.1449051.

13. Pike, E., Tillson, M., Webster, J. M., & Staton, M. 2019. A mixed-methods assessment of the impact of the opioid epidemic on first responder burnout. *Drug and Alcohol Dependence* 205, 107620. https://www.sciencedirect.com/science/article/abs/pii/S0376871619303977?via%3Dihub.

14. Williams-Yuen, J., Minaker, G., Buxton, J., Gadermann, A., & Palepu, A. 2020. 'You're not just a medical professional': Exploring paramedic experiences of overdose response within Vancouver's downtown eastside. *PLoS ONE* 15, e0239559. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0239559.

15. Won, N. Y., Palamar, J. J., Mike, S. A., Fitzgerald, N. D., & Cottler, L. B. 2023. A qualitative analysis of emergency medical services personnel experiences and perception responding to drug overdoses in the US during the COVID-19 pandemic. *Journal of Health Research* 37, 270–279. https://digital.car.chula.ac.th/jhr/vol37/iss4/10/.

16. Dhanani, L. Y., Harris, E. L., Mirto, J., & Franz, B. 2022. Barriers to working with patients who misuse opioids and physician burnout: Implications for medical education. *Substance Use & Misuse* 57, 1177–1184. https://www.tandfonline.com/doi/full/10.1080/10826084.2022.2069264.

17. Saunders, E., et al. 2019. "You can see those concentric rings going out": Emergency personnel's experiences treating overdose and perspectives on policy-level responses to the opioid crisis in New Hampshire. *Drug and Alcohol Dependence* 204, 107555. https://www.sciencedirect.com/science/article/abs/pii/S0376871619303321?via%3Dihub.

18. Vadiei, N., Eldridge, L. A., Meyerson, B. E., & Agley, J. 2022. "The gatekeepers in prevention": Community pharmacist perceptions of their role in the opioid epidemic. *Substance Abuse* 43, 319–327. https://journals.sagepub.com/doi/10.1080/08897077.2021.1941516.

19. Dowdell, E. B., Alderman, S. E., Foushee, N., Holland, E., & Reedy, E. A. 2022. Expressions of compassion fatigue by emergency department nurses caring for patients with opioid and substance use disorders. *Journal of Emergency Nursing* 48, 688–697. https://www.jenonline.org/article/S0099-1767(22)00178-7/abstract.

20. Horner, G., et al. 2019. "You're kind of at war with yourself as a nurse": Perspectives of inpatient nurses on treating people who present with a comorbid opioid use disorder. *PLoS ONE* 14, e0224335. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0224335.

21. Reese, S. E., et al. 2021. Experiences of nursing professionals working with women diagnosed with opioid use disorder and their newborns: burnout and the need for support. *Advances in Neonatal Care* 21, 32. https://journals.lww.com/advancesinneonatalcare/abstract/2021/02000/experiences_of_nursing_professionals_working_with.7.aspx.

22. Cooley, R., Venkatachalam, A. M., Aguilera, V., Olson, D. M., & Stutzman, S. E. 2022. A Qualitative study of nurses' perceptions of narcotic administration after subarachnoid hemorrhage. *Pain Management Nursing* 23, 151–157. https://www.painmanagementnursing.org/article/S1524-9042(21)00121-1/abstract.

23. Carroll, J. J., Colasanti, J., Lira, M. C., del Rio, C., & Samet, J. H. 2019. HIV physicians and chronic opioid therapy: It's time to raise the bar. *AIDS Behav* 23, 1057–1061. https://link.springer.com/article/10.1007/s10461-018-2356-2.

24. Shearer, R. D., et al. 2024. Providers' experiences and perspectives in treating patients with co-occurring opioid and stimulant use disorders in the hospital. *Substance Use Addiction Journal* 45, 250–259. https://journals.sagepub.com/doi/10.1177/29767342231221060.

25. Webster, F., et al. 2019. An ethnography of chronic pain management in primary care: The social organization of physicians' work in the midst of the opioid crisis. *PLoS ONE* 14, e0215148. https://doi.org/10.1371/journal.pone.0215148.

26. St. Louis, J., et al. 2022. Barriers to care for perinatal patients with opioid use disorder: family physician perspectives. *Family Practice* 39, 249–256. https://academic.oup.com/fampra/article/39/2/249/6433698.

27. Gimenez, L., et al. 2024. Barriers and facilitators to the involvement of general practitioners in the prescription of buprenorphine. *Journal of Substance Use and Addiction Treatment* 156, 209182. https://doi.org/10.1016/j.josat.2023.209182.

28. Hadler, R. A., et al. 2024. Dangerous variation or patient-centered care? Palliative care and pain providers' comfort, experiences, and approaches when treating cancer pain with coexisting aberrant behaviors. *The American journal of hospice & palliative care*. https://doi.org/10.1177/10499091241259034.

29. Desveaux, L., Saragosa, M., Kithulegoda, N., & Ivers, N. M. 2019. Family physician perceptions of their role in managing the opioid crisis. *Annals of Family Medicine* 17, 345–351. https://doi.org/10.1370/afm.2413.

30. Haggerty, T., Sedney, C. L., Dekeseredy, P., Capehart, K. D., & Pollini, R. A. 2023. "You didn't have a choice, but to be on your train. The train was moving": West Virginia pharmacists' perspectives on opioid dispensing during the evolution of the opioid crisis. *Journal of the American Pharmacists Association* 63, 863–872. https://doi.org/10.1016/j.japh.2023.02.004.

31. Hohmeier, K. C., et al. 2022. Exploring the frontline experiences of pharmacy technicians during the opioid epidemic in community pharmacies. *Journal of the American Pharmacists Association* 62, 1338–1343. https://doi.org/10.1016/j.japh.2022.03.005.

32. Kinney, S. G. & Kiesel, J. D. 2023. Physical therapy professionals' opioid knowledge and attitudes in a midwestern state: A cross sectional survey. *Internet Journal of Allied Health Sciences & Practice* 22, 1–10. https://nsuworks.nova.edu/ijahsp/vol22/iss1/23/.

33. Sable, P., Tang, F., Swab, J. A., Roth, S., & Rosen, D. 2023. EMS workers on the frontline of the opioid epidemic: effects of sleep and social support on depression. IJES 12, 306–317. https://doi.org/10.1108/*IJES*-08-2022-0037.

34. Baumgart-McFarland, M., Chiarello, E., & Slay, T. 2022. Reluctant saviors: Professional ambivalence, cultural imaginaries, and deservingness construction in naloxone provision. *Social Science & Medicine* 309, 115230. https://doi.org/10.1016/j.socscimed.2022.115230.

35. Patch, K. et al. 2023. "It's pretty sad if you get used to it": A qualitative study of first responder experiences with opioid overdose emergencies. *Prehospital Emergency Care* 0, 1–8. https://pubmed.ncbi.nlm.nih.gov/37436072/.

36. Maxwell, J., et al. 2022. Perceptions of speech-language pathologists' service provision in the opioid epidemic: A focus group study. *American Journal of Speech-Language Pathology* 31, 1672–1686. https://doi.org/10.1044/2022_AJSLP-21-00337.

37. Cernasev, A., et al. 2021. Pharmacy technicians, stigma, and compassion fatigue: Front-line perspectives of pharmacy and the US opioid epidemic. *IJERPH* 18, 6231. https://pubmed.ncbi.nlm.nih.gov/34207590/.

38. Boulden, R. & Brown, C. 2022. "We're kind of forgotten": An initial investigation of Appalachian school counselors' lived experiences responding to the opioid crisis. *APA PsycNet*. https://psycnet.apa.org/record/2023-34193-006.

39. Hurstak, E. E., et al. 2017. The risks of opioid treatment: Perspectives of primary care practitioners and patients from safety-net clinics. *Substance Abuse* 38, 213–221. https://pubmed.ncbi.nlm.nih.gov/28394752/.

40. Oberleitner, D. E., et al. 2021. "Day-to-day, it's a roller coaster. It's frustrating. It's rewarding. It's maddening and it's enjoyable": A qualitative investigation of the lived experiences of addiction counselors. *Psychological Services* 18, 287–294. https://pubmed.ncbi.nlm.nih.gov/31580103/.

41. Hatch-Maillette, M. A., et al. 2019. Counselor turnover in substance use disorder treatment research: Observations from one multi-site trial. *Substance Abuse* 40, 214–220. https://pmc.ncbi.nlm.nih.gov/articles/PMC6759413/.

42. Williams, A. V., Strang, J., & Marsden, J. 2013. Development of opioid overdose knowledge (OOKS) and attitudes (OOAS) scales for take-home naloxone training evaluation. *Drug Alcohol Dependence* 132, 383–6. https://doi.org/10.1016/j.drugalcdep.2013.02.007.

43. Heritage, B., Rees, C. S., & Hegney, D. G. 2018. The ProQOL-21: A revised version of the Professional Quality of Life (ProQOL) scale based on Rasch analysis. *PloS one* 13, e0193478–e0193478. https://doi.org/10.1371/journal.pone.0193478.

44. Stamm, B. 2010. The concise manual for the professional quality of life scale. https://www.illinoisworknet.com/WIOA/Resources/Documents/The-Concise-ProQOL-Manual.pdf.

45. Xiao, Y., Chen, T., Zhu, S., Li, C., & Zong, L. 2024. Factors associated with workplace violence against Chinese healthcare workers: an online cross-sectional survey. *Frontiers in public health* 12, 1295975. https://doi.org/10.3389/fpubh.2024.1295975.

46. Braun, V. & Clarke, V. 2021. *Thematic Analysis: A Practical Guide*. Sage Publishing. https://us.sagepub.com/en-us/nam/thematic-analysis/book248481.

47. Morse, J. M. 2015. Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research* 25, 1212–22. https://doi.org/10.1177/1049732315588501.

48. Wang, P., Wang, M., Hu, G., & Wang, Z. 2006. Study on the relationship between workplace violence and work ability among health care professionals in Shangqiu City. *Wei sheng yan jiu= Journal of hygiene research* 35, 472–474. https://pubmed.ncbi.nlm.nih.gov/16986527/.

49. Tian, Y. et al. 2020. Workplace violence against hospital healthcare workers in China: a national WeChat-based survey. *BMC public health* 20, 1–8. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-08708-3.

50. Corman, M. K. 2023. *Lights and Sirens: The Critical Condition of EMS in Alberta*. https://ww.parklandinstitute.ca/lights_and_sirens.

51. Occupational Cancer Research Centre (Ontario Health) and Institute for Work & Health. 2025. *Opioids and work: Evidence, perspectives, and looking ahead workshop report*. https://opioidsandwork.ca/sites/opioids/files/opioids_and_work_workshop_report_2024.pdf?utm_source=IWH+subscribers&utm_campaign=63bdac321e-IWH_NEWS_2025_06&utm_medium=email&utm_term=0_-63bdac321e-547579776.

52. Galiher, M. V. & Huffman, M. 2022. Attitude changes following short-form opioid overdose video education: a pilot study. *Harm Reduction Journal* 19, 114. https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-022-00696-4.

53. Halmo, R. S., Sellers, C. M., Collin, C.-R. R., Chinamasa, G., & Putney, J. M. 2022. Changes in social work students' attitudes and knowledge following opioid overdose prevention training. *Substance Abuse* 43, 289–293. https://doi.org/10.1080/08897077.2021.1941511.

APPENDIX A - DATA EXTRACTION TABLE

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Baumgart-McFarland et al., 2022	Reluctant Saviors: Professional ambivalence, cultural imaginaries, and deservingness construction in naloxone provision	Midwest, U.S.	Interviews	20 first responders: police, firefighters, and emergency medical technicians/ paramedics	Explore opinions about and experiences with naloxone provision	Qualitative, descriptive	Disconnect between the imaginary and professionals' lived experience resulted in a profound feeling of futility Naloxone was not addiction treatment, resulting in a feeling of futility—frustration that their attempts to help seemed fruitless Naloxone was not addiction treatment, resulting in a feeling of futility—frustration that their attempts to help seemed fruitless Participants paying their frustration forward to the patient and naloxone resulted in less compassion for patients
Beitel et al., 2018	Experiences of burnout among drug counselors in a large opioid treatment program: A qualitative investigation	Connecticut, U.S.	Interviews	31 drug counselors	Explore experiences of burnout and the strategies used to manage and/or prevent it	Qualitative, descriptive	Burnout reported by participants was due to clinical demands such as emergencies, patient volume, and work pace Burnout symptoms included not completing expected work tasks and becoming irritable with colleagues Counselors emphasized the importance of supervision in reducing stress, being goal driven, and gaining perspective Drug counselors already employed a large array of coping strategies to minimize the risk of burnout The stressful nature of the job (e.g., managing patient behaviors, paperwork demands) was identified as a common cause of counselor burnout
Boulden & Brown, 2022	"We're kind of forgotten": An initial investigation of Appalachian school counselors' lived experiences responding to the opioid crisis	Appalachia, U.S.	Interviews	Five school counselors	Examine lived experiences working in communities adversely affected by the ongoing opioid epidemic	Qualitative, descriptive	"I do a lot of self-care because you just have to; I make sure I do stuff for me" For teachers and educators, there was frustration because they just want to teach Participants advocated to address student basic needs Participants had moments that instilled hope and belief in their effectiveness There was a lack of quality training for school staff centered on opioid use and addiction

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Carroll et al., 2019	HIV physicians and chronic opioid therapy: It's time to raise the bar	U.S.	Interviews	10 HIV care physicians	Explore concerns and perspectives related to chronic opioid therapy	Qualitative, descriptive	A perceived lack of clinical training resulted in a deep frustration Developing trusting relationships in primary care was key for the promotion of patient health Monitoring patients receiving chronic opioid therapy added to the list of tasks the clinical team then needs to address in a limited amount of time There was anxiety that any disruptions to chronic opioid therapy would destabilize the patient-provider relationship
Cernasev et al., 2021	Pharmacy technicians, stigma, and compassion fatigue: Front-line perspectives of pharmacy and the U.S. opioid epidemic	Tennessee, California, New Jersey, Florida, Georgia, and Alabama; U.S.	Focus groups	46 pharmacy technicians	Characterize stigma through pharmacy technicians caring for patients using opioids	Qualitative, descriptive	Negative interactions between pharmacy staff and patients displaying signs of addictive opioid-use behavior occurred Participants believed that they have developed or needed to develop a thick skin to deal with patients Participants displayed frustration in dealing with patients who seek early refills or who might be attempting to "game the system" Participants were referred to as the "face" of community pharmacy Technicians expressed empathy for patients' conditions and a feeling of responsibility for providing high-quality care
Cooley et al., 2022	A qualitative study of nurses' perceptions of narcotic administration after subarachnoid hemorrhage	U.S.	Interviews	Nine neuroscience intensive care unit nurses	Understand the experiences and processes of nurses when administering opioids	Qualitative, descriptive	Nurses were frustrated with not having access to "as needed" orders for the patient or multiple agents for pain There was difficulty distinguishing between the lack of alertness cause by opioids or worsening bleeding There was stress of needing to please family with pain management plans When patients were able to participate in exams and in their own care, it affected the nurses' morale and confidence in pain management

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Desveaux et al., 2019	Family physician perceptions of their role in managing the opioid crisis	Ontario, Canada	Interviews	22 family physicians	Explore perspectives on opioid prescribing, the management of chronic noncancer pain, and differences that may be potential drivers of practice variation	Qualitative, descriptive	Knowing their patients reduced participants' concerns about aberrant behavior and the perceived need to implement enforcement measures Participants were frustrated by an inability to effectively address patient needs Physicians are already experiencing unprecedented rates of work-related stress and burnout Tension adhering to guidelines while attempting to effectively manage patient symptoms occurred There was conflict between their desired role as a healer and the emerging expectation to police opioid use and misuse
Dhanani et al., 2021	Revisiting the relationship between contact and physician attitudes towards patients with opioid use disorder	Ohio, U.S.	Surveys	408 board-certified physicians	Examine bias, burnout, and stress as potential situational and personal characteristics	Quantitative, cross-sectional	Contact with patients with OUD may heighten the effects of bias, burnout, and stress The conditional negative effects of bias, stress, and burnout on willingness to work with patients with OUD were the strongest when levels of contact were high
Dhanani et al., 2022	Barriers to working with patients who misuse opioids and physician burnout: Implications for medical education	Ohio, U.S.	Surveys	408 physicians	Assess experiences working with patients who misuse opioids and barriers encountered	Mixed methods, cross-sectional, descriptive	Growth of non-prescription opioid use among patients was identified as "overwhelming" Key barriers to providing quality patient care were frustration and burnout from participants' work Physicians described providing empathetic care only to have the patient experience a negative outcome, resulting in "compassion fatigue" Positive feelings were described by some physicians and included feeling gratified, fulfilled, and hopeful Practices that made them more resilient to burnout and frustration included better understanding their patient or creating alternatives to opioid treatment They often felt helpless to connect patients with affordable, accessible, and evidence-based treatment services

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Dowdell et al., 2022	Expressions of compassion fatigue by emergency department (ED) nurses caring for patients with opioid and substance use disorders (SUDs)	Philadelphia, U.S.	Focus groups	55 emergency nurses	Gain insight and understanding about perceptions and feelings of caring for patients with OUD and/or SUD	Qualitative, descriptive	Frustrations about the time spent, resources, and energy devoted to patients with OUD and/or SUD contributed to compassion fatigue Negative job satisfaction was com mon and related to the ED environment Overstressed nurses often react by leaving a position when they believe they will not get relief Participants talked about having hope that change would happen in the ED, with staffing, management, and workload Stressors included being understaffed, having few available professional supports, and an absence of recognition from management/ administration
Filteau et al., 2022	"It's more the just a job to them": A qualitative examination of patient and provider perspectives on medication-assisted treatment for opioid use disorder	Montana, U.S.	Interviews	Seven care coordinators, three clinical social workers, seven program managers, 12 prescribing providers, five peer support specialists, six licensed addictions counselors, 10 registered nurses,15 executive staff (including CEOs and COOs), and 25 patients	Examine the constraints providers face as well as patients' experiences with MAT for OUD	Qualitative, descriptive	Difficulty treating a full case load of MAT patients occurred MAT contributed to stress and burnout Participants needed to create boundaries and manage expectations for patients and staff to prevent burnout Providers and staff reported challenges recruiting staff, high burnout levels, and an inability to meet demands for substance use treatment services Staff genuinely cared for their patients and want to provide the best treatment they can
Gimenez et al., 2024	Barriers and facilitators to the involvement of general practitioners in the prescription of buprenorphine	France	Interviews, focus group	17 general practitioners (GPs)	Investigate the obstacles and facilitators to involvement in the prescription of buprenorphine	Qualitative, descriptive	Adoption of motivational or educational approaches seemed to liberate GPs from their own considerations and objectives Frequent renewal of prescriptions required a great availability and a lot of time despite GPs already being overwhelmed GPs described their ethical difficulty in risking seeing their prescriptions used for drug trafficking or recreational use Management of patients with OUD seemed to disrupt GP-patient relationships and generated a feeling of powerlessness Patients' knowledge could exceed that of GPs and may have destabilized them, leading to their role being reduced to that of a passive prescriber

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Hadler et al., 2024	Dangerous variation or patient-centered care? Palliative care and pain providers' comfort, experiences, and approaches when treating cancer pain with coexisting aberrant behaviors	U.S.	Interviews	Eight nurse practitioners/ PAs, 29 physicians	Explore how clinicians with specialized training in palliative care and pain management approach the management of aberrant drug-related behaviors in clinical practice	Qualitative, descriptive	Clinicians perceived themselves as prescribers of last resort for patients with cancer pain and aberrant drug-related behaviors Limited availability of addiction specialists was a significant source of distress Participants reduced opioid prescribing in response to increasing administrative and medico-legal burden Participants reported that their access to social workers and other specialists was limited by time and caseload Participants worried about the repercussions of prescribing medications that might be abused, resold, or implicated in an overdose
Haggerty et al., 2023	"You didn't have a choice, but to be on your train. The train was moving": West Virginia pharmacists' perspectives on opioid dispensing during the evolution of the opioid crisis	West Virginia, U.S.	Interviews	10 pharmacists	Understand the need for and impact of restrictive opioid legislation on practice and patient care	Qualitative, descriptive	Larger societal forces were perceived to be at play, contributing to a sense of powerlessness Pharmacists felt that their employers did not "have their back" if they decided not to fill a prescription for a patient Pharmacists who question an opioid prescription were occasionally met with hostility from both patients and prescribers The opioid crisis has increased the burden of patient counseling and medication surveillance They felt empowered by recent policy changes to interrupt individual prescriptions or act at the individual patient level They were aware of their responsibility, but they felt pressure from employers to fill prescriptions despite their suspicions about excessive opioid prescribing
Hatch-Maillette et al., 2019	Counselor turnover in SUD treatment research: Observations from one multisite trial	U.S.	Surveys	64 counselors	Provide a qualitative description of challenges related to effectiveness research in SUD treatment settings	Quantitative, cross-sectional	Accelerated turnover occurred due to increased productivity expectations, increases in caseload, and decreases in administrative time Counselors were asked to mount complicated evidence-based practices, resulting in performance pressure and competing priorities One of the barriers in the behavioral health arena is staff turnover

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Hohmeier et al., 2022	Exploring the frontline experiences of pharmacy technicians during the opioid epidemic in community pharmacies	Tennessee, California, New Jersey, Florida, Georgia, and Alabama; U.S.	Focus groups	46 pharmacy technicians	Explore intentions and motivations for serving patients who are receiving prescription opioid medications	Qualitative, descriptive	Given the intensity of negative interactions with opioid dispensing, pharmacy technicians felt drained, fatigued, and numb Participants perceived bearing the brunt of the negative interactions with patients receiving opioid medications Patient-technician interactions included participants being patient advocates and establishing rapport Positive and supportive coworker interactions and time away from patient care to "regroup" was felt to mitigate emotional problems Support from pharmacists was suboptimal, with technicians feeling underappreciated and undervalued There was a rising degree of compassion fatigue
Horner et al., 2019	"You're kind of at war with yourself as a nurse": Perspectives of inpatient nurses on treating people who present with a comorbid opioid use disorder	Boston, Manhattan, U.S.	Interviews	22 nurses	Understand the attitudes, perceptions and training needs of nurses caring for patients with OUD	Qualitative, descriptive	Feelings associated with burnout were common among nurses, with several expressing frustration and exhaustion working with a more "demanding" population Feelings of disappointment stemmed from wanting to trust patients but often being let down Hostile interactions contributed to a "cycle of problems" and perpetuated stigma against patients There was a notion of offering futile care to patients who may not be willing or able to fully recover There was internal conflict over medicating pain, worrying that pain medicine would contribute to addictions There were attempts to reframe addiction as a disease to approach patient concerns as genuine

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Hurstak et al., 2017	The risks of opioid treatment: Perspectives of primary care practitioners and patients from safety-net clinics	San Francisco Bay Area, U.S.	Interviews	23 primary care providers (PCPs) and 46 patients	Analyze how clinicians and their patients with chronic non-cancer pain and past or present substance use perceived the risks of opioids	Qualitative, descriptive	Fear of overdose, misuse, and diversion had prompted shifts in opioid prescribing, both at the level of the clinic and the individual clinician Fears about opioids are evolving in the context of publicity of opioid risks, the issuing of guidelines, clinician education on opioid risk, opioid monitoring policies, and reports of clinician prosecution PCPs had a sense of personal responsibility to prevent overdose through "disciplined" prescribing PCPs worried that co-prescribing naloxone meant that they were acknowledging the serious risks of opioids while continuing to prescribe them
Kinney & Kiesel, 2023	Physical therapy professionals' opioid knowledge and attitudes in a midwestern state: A cross-sectional survey	Indiana, U.S.	Surveys	67 PT professionals	Determine opioid knowledge, attitudes towards opioid use, and knowledge on managing an opioid overdose	Quantitative, cross-sectional	Few PT professionals felt they had a role in an emergent opioid overdose Participants indicated a desire to help in emergent opioid overdoses Participants indicated they did not have enough training to manage emergent overdose situations Participants lacked confidence in administering naloxone
Lofaro & Sapat, 2024	Occupational and personal challenges during the opioid crisis: Understanding first responders' experiences and viewpoints of clients with opioid use disorder	U.S.	Surveys	2 722 EMS-providers,1 114 law enforcement officers	Examine the lived experiences of first responders and opinions about clients with opioid use disorder	Quantitative, cross-sectional	Indirect and direct personal experiences with addiction positively influenced first responders' opinions Participants were often coping with multiple hazards and stressors simultaneously Participants were tasked with responding to overdose calls and reviving people from overdose while coping with addiction-related issues in their personal lives
Louis et al., 2022	Barriers to care for perinatal patients with opioid use disorder: Family physician perspectives	U.S.	Interviews	17 family physicians	Describe experiences providing comprehensive care to pregnant people with OUD and the challenges faced in providing such care	Qualitative, descriptive	Implementation of a new documentation method led to less time scheduled for counselors' documentation and paperwork Persistent negative interactions occurred between patients seeking opioid medications and "gatekeeper" health care workers Providers described the time and frustration of filling out prior authorization forms to ensure access to buprenorphine products

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Luckett et al., 2020	Risk of opioid misuse in people with cancer and pain and related clinical considerations: A qualitative study of the perspectives of Australian general practitioners	New South Wales, Australian Capital Territory, Queensland, and South Australia; Australia	Interviews	22 GPs	Explore experiences, beliefs and attitudes concerning the risk of opioid misuse in people with pain and cancer and related clinical considerations	Qualitative, descriptive	Compassion towards patients with cancer caused GPs to be slower to determine opioid misuse or addiction Discharge letters from cancer services were often delayed and rarely included information about opioid therapy Media attention and monitoring in response to the opioid crisis led to reluctance among GPs to prescribe, even when opioids were indicated The time required to engage in high-quality, person-centred pain management was constrained by the business model of contemporary primary care There were concerns that patients might stockpile opioids as a recourse for ending their own life
Maxwell et al., 2022	Perceptions of SLPs' service provision in the opioid epidemic: A focus group study	West Virginia, U.S.	Focus groups	20 SLPs	Learn from experiences of working with children with a history or suspected history of opioid exposure on a daily basis	Qualitative, descriptive	Frustration occurred with other professionals, with caregivers, with slow progress, with themselves, with lack of information, and so forth Many participants expressed that their primary role is advocacy, with a focus on establishing relationships Participants had personal initiatives to seek out additional information on working with children and increase their ability to support students Participants were concerned for these children and felt helplessness about how to best meet their needs There was uncertainty about eligibility criteria and unclear roles and responsibilities due to complex needs of children There were difficulties related to providing assessment and intervention services such as lack of relevant information, difficulty providing the one-on-one services, and barriers to service delivery

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Oberleitner et al., 2021	"Day-to-day, it's a roller coaster. It's frustrating. It's rewarding. It's maddening and it's enjoyable": A qualitative investigation of the lived experiences of addiction counselors	Connecticut, U.S.	Interviews	31 addiction counselors	Exploration of addiction counselors' lived experiences by examining their work roles, work motivation, and perceived responses of others to their work	Qualitative, descriptive	Counselors attempted to shape the reactions of others by emphasizing their clinical expertise and their positive contribution to the opioid crisis Counselors find themselves adopting the roles of educators and advocates with others who often hold inaccurate or pejorative views of their work Counselors who treat clients with addiction also experienced stigma Counselors' enjoyment of the complexity, challenge, and the witnessing of improvements in their clients' lives were important intrinsic motivation factors Positive interactions with clients were self-reinforcing
Patch et al., 2023	"It's pretty sad if you get used to it": A qualitative study of first responder experiences with opioid overdose emergencies	Ohio, U.S.	Interviews	18 firefighters, emergency medical technicians or paramedics	Understand experiences and attitudes toward treating opioid overdose, as well as the emotional effects, coping strategies, support systems, and views on policies related to the opioid epidemic	Qualitative, descriptive	Participants reported becoming "numb," "callous," and "desensitized" in their response Perceived inefficacy seemed to have a negative cumulative effect over time, leading to compassion fatigue, hopelessness, demoralization, desensitization to patients, and burnout in some participants Respondents coped with the stress of opioid-related emergencies by talking about calls with others, creating boundaries between work and home life, and practicing general healthy habits and stress relief Respondents expressed compassionate views about patients and said their beliefs about opioid addiction had evolved and led to increased compassion Respondents expressed frustration with perceived limitations on their ability to affect long-term patient outcomes Respondents felt that it is not their "job to solve this problem" Some participants shared that the cumulative emotional effects of these and other emergencies had led them to seek temporary transfers to lesser-affected areas

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Pike et al., 2019	A mixed-methods assessment of the impact of the opioid epidemic on first responder burnout	Kentucky, U.S.	Interviews and surveys	196 first responders: 151 law enforcement officers, 36 firefighters/ paramedics/ emergency medical technicians (EMTs), nine dispatchers; 12 first responder interviews	Examine burnout by describing it among first responders, exploring how the opioid epidemic has affected their profession, and examining how the effects of the opioid epidemic differed among their fields of work	Mixed methods, cross-sectional, descriptive	Community opioid misuse was a significant problem that has led to burnout among participants and increased burdens on available services Participants expressed helplessness to prevent future overdoses, particularly when responding to calls for the same individuals Positive feelings demonstrated a sense of job satisfaction or engagement with their job that is the opposite of burnout Risks to personal safety further increased stress and reduced compassion among participants The opioid epidemic affected participants' professions and made it more difficult for them to perform their job duties There was a growing indifference or a numbed emotional response
Rao et al., 2021	Pharmacist views regarding the prescription opioid epidemic	Pennsylvania, West Virginia, and Ohio; U.S.	Surveys	50 community pharmacists	Explore opinions, experiences, and beliefs relating to the use and misuse/abuse of prescription opioids and the prescription opioid epidemic in the U.S.	Qualitative, descriptive	Negative attitudes toward MAT seemed to stem from a lack of knowledge of their effectiveness Participants perceived their current practice scope to be limited and unsuitable for role expansion Personal experiences helped motivate participants to provide better care Personal experiences motivated them to provide better care Pharmacists were frustrated and felt that prescribers will view them as an interfering Prescribers did not support their clinical judgment

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Reese et al., 2021	Experiences of nursing professionals working with women diagnosed with opioid use disorder and their newborns: Burnout and need for support	Utah, U.S.	Focus groups	30 nurses or nursing assistants	Understand experiences caring for women diagnosed with OUD and their newborns on a maternal–newborn and neonatal intensive care unit	Qualitative, descriptive	At times, participants experienced their work as rewarding and patients as pleasant and enjoyable Burnout led to a reduction in work satisfaction, a higher turnover rate, relationship stress, substance misuse, depression, and suicide Negative feelings toward women with OUD may have been related to the experience of burnout—a constellation of symptoms including "emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment" Participants felt supported by the team Participants had concerns for the welfare of newborns and frustration with what they perceived as disengaged parents Patients diagnosed with OUD were more time- and labor-intensive
Sable et al., 2023	EMS workers on the frontline of the opioid epidemic: Effects of sleep and social support on depression	Pennsylvania, U.S.	Surveys	608 emergency medical service (EMS) workers	Examine the impact of opioid overdose calls and attitudes towards individuals with SUDs on EMS workers' mental well-being	Quantitative, cross-sectional	Feelings of helplessness and lack of capacity to help were associated with reported emotional stress and feelings of burnout Improved sleep and social support significantly reduced the impact of frequent overdose calls on depression Lack of treatment options for individuals with OUD may have contributed to feelings of helplessness Many workers would turn to a colleague for work-related stress More negative attitudes about opioid use and treatment were associated with an increased likelihood of experiencing depression Their concerns were not only related to physical safety and workload, as the epidemic also affected their emotional well-being Workers favor harm reduction policies, citing their effectiveness as the main reason for their support

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Saunders et al., 2019	"You can see those concentric rings going out": Emergency personnel's experiences treating overdose and perspectives on policy-level responses to the opioid crisis in New Hampshire	New Hampshire, U.S.	Interviews	36 emergency personnel: six firefighters, six police officers, six EMS, nine physicians, five nurses, two ED medical directors/ physicians, one paramedic, one PA	Examine emergency personnel's experiences responding to overdose, including the process of treating overdoses, personnel's knowledge about illicitly manufactured fentanyl, and the personal and professional impact of responding	Qualitative, descriptive	After overdoses occur, interactions between physical, economic, social, and policy-related factors create challenges for responders Coping mechanisms utilized by participants included seeking professional counseling, having informal conversations with colleagues and friends, utilizing humor, or switching roles to minimize time in the field Frustration occurred due to numerous physical, economic, and policy-level barriers Participants recognized symptoms of compassion fatigue or posttraumatic stress among themselves or their colleagues, including symptoms like fatigue, powerlessness, fear, and intrusive recollections of events The burgeoning increase in overdose-related encounters took a significant emotional toll on participants, who described feeling burned out, exhausted, and helpless at times
Shearer et al., 2024	Providers' experiences and perspectives in treating patients with co-occurring opioid and stimulant use disorders in the hospital	Midwest, West, and Northeast U.S.	Interviews	20 participants: 11 physicians (trained in psychiatry, internal, emergency, and family medicine), four nurses, three social workers, and two pharmacists	Explore current approaches to addressing opioid and stimulant co-use; challenges specific to co-use; and opportunities for improving treatment of patients with co-use in the hospital setting	Qualitative, descriptive	Participants described unstable life circumstances and medical comorbidities that frequently complicated care for patients with co-use Participants had "less enthusiasm about treatment success" and anticipated poor treatment outcomes Participants reported difficulty distinguishing between opioid and stimulant withdrawals Without effective pharmacologic options, providers felt that treating stimulant use disorder was futile and often ignored it during patients' hospital stays
Vadiei et al., 2022	"The gatekeepers in prevention": Community pharmacist perceptions of their role in the opioid epidemic	Indiana, U.S.	Surveys	214 pharmacists	Evaluate community pharmacists' perception of their role in the opioid epidemic and assess what barriers they face in fulfilling their perceived role	Qualitative, descriptive	Burden of work was so high that it prevented opioid-related consultation interventions Feelings of frustration were derived from patients and coworkers in respect to their many obligatory job requirements Participants felt like a "gatekeeper in prevention" for opioid misuse in their patient population Structural barriers were reported, such as burden of responsibilities, minimal time, lack of service reimbursement, and limited consultation space

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Webster et al., 2019	An ethnography of chronic pain management in primary care: the social organization of physicians' work in the midst of the opioid crisis.	Ontario, Canada	Interviews	19 PCPs and eight nurses	Explore experiences of providing care to patients with chronic pain	Qualitative, descriptive	PCPs are often unable to effectively facilitate treatments because their patients struggle with more pressing and immediate concerns, such as housing Physicians described being frustrated, worried and distressed by their inability to address their patients' most pressing needs Providing care now frequently revolves around restricting and reducing opioid dosing in patients with chronic pain Stress, emotional exhaustion and even depersonalization are linked with treating patients with low socio-economic status The shifting nature of the work performed by care providers caused them frustration, exhaustion and compromised job satisfaction
Williams-Yuen et al., 2020	"You're not just a medical professional": Exploring paramedic experiences of overdose response within Vancouver's downtown eastside.	Vancouver, Canada	Interviews	10 paramedics	Explore experiences during the overdose crisis	Qualitative, descriptive	Encountering repeat patients who overdose was described as an experience which often left participants feeling helpless Increased call volumes which paramedics responded to was cited as a source of stress Participants addressed the lack of control and feelings of frustration by trying to understand patient perspectives and adopting empathetic attitudes Participants described feeling frustration and resentment during patient encounters, with one paramedic labeling their experience as "compassion fatigue" Participants described feeling frustration and resentment during patient encounters Participants often faced difficulties when moving overdose patients to different levels of care Participants prioritized patient needs above regular protocols

Author/Year	Title	Geographic Location	Study Design	Participants	Question/ Aim	Method	Themes/Outcomes
Won et al. (2023)	A qualitative analysis of emergency medical services (EMS) personnel experiences and perceptions responding to drug overdoses in the United States (US) during the Covid-19 pandemic	U.S.	Interviews	69 EMS chiefs, 12 paramedics, 10 EMTs, and eight others	Explore perspectives on the substance use crisis, overdose events, naloxone administrations, and burnout	Qualitative, descriptive	"Compassion fatigue" resulted not only from large caseloads, but also from aiding the same overdose patients "day in and day out" Call volumes overall increased during the pandemic EMS personnel provided harm reduction and outreach to patients Increases in drug-related emergencies placed great strain on the full EMS system and led to reported burnout among EMS personnel Participants continued to reiterate the importance of not disregarding the opioid epidemic Participants reported reduced personal time and vacation Participants reported that due to chronic exposure to assault and dishonesty, their morale was destroyed their views about society overall were skewed Repeated visits felt "like a waste of resources," or participants felt that "overdose is irresponsible and self-induced" Strain related to the extra work reportedly led to high turnover rates with some EMS personnel quitting to search for less stressful jobs

APPENDIX B - SURVEY INSTRUMENTS

Section A of the survey was a 12 question multi-dimensional survey with three subscales: 1) Opioid-related factors, 2) Professional characteristics, and 3) Demographics. The response categories are a mixture of nominal, ordinal, and categorical. Question 2, "Have you been affected at work by the opioid/drug poisoning crisis?" served as a screening question. If the participant answered "no," they were directed to the end of the survey and excluded from the study. If the participant answered "unsure" they were included in our analysis since participants had some level of effect regarding the opioid crises. These questions were created by the research team to document the profile of the people who completed the survey and ensure that survey participants had relevant experience to the study.

Section B included the Opioid Overdose Knowledge Scale (OOKS)[43,53] which is a 45-item measure designed to assess knowledge related to opioid overdose prevention, recognition, and response actions. The OOKS is a multi-dimensional scale that has the following subscales: 1) Opioid Overdose Recognition, 2) Naloxone Use Knowledge, and 3) General Awareness of Opioid Overdose Prevention[43]. The OOKS items have the response selections yes/no or don't know and true/false or don't know, where a correct answer scored the participant a single point and don't know or incorrect responses scored no points[43]. There is an answer key that accompanies these questions, as they assess knowledge about opioids. The possible range of scores for the OOKS is from 0 to 45, with higher scores indicating greater knowledge about opioid overdose prevention[43].

The OOKS has shown good reliability with a Cronbach's Alpha score of 0.83 and test-retest reliability ICC total score was excellent (ICC = 0.90 total score of subscales and varying range of subscales from 0.53 to 0.87)[43]. The OOKS was compared to other scales like the Opioid Overdose Attitude Scale (OOAS) and Brief Opioid Risk and Recognition Assessment (BORRA) to assess concurrent validity[43]. The OOKS had a positive correlation with the OOAS ($r = 0.51$, $p < 0.001$)[43].

The positive correlation indicates that higher knowledge on the OOKS is associated with increased knowledge about opioid overdose treatment and prevention[43]. In a previous study, health care professionals had a significantly higher score on OOKS compared to their non-health care profession family members[43]. The assessment of reliability and validity was assessed in other studies that included health care professionals, similarly to our study[43].

Section C included the Opioid Overdose Attitude Scale (OOAS)[43,53], a 28-item multi-dimensional scale with three sections: competence, concerns, and readiness[43]. The OOAS is designed to measure attitudes toward opioid overdose prevention and response[43]. The OOAS uses a 5-point Likert scale with the following response options:

- Completely disagree (1 points)
- Disagree (2 points)
- Unsure (3 points)
- Agree (4 points)
- Completely agree (5 points)[43]

The scores ranged from a low of 28 to a high of 140 where higher scores indicate increased readiness and willingness to intervene in an opioid overdose[53]. Any negatively worded items are reversed scored at data entry[53]. The OOAS has shown good reliability with a Cronbach's Alpha score of 0.90 and test-retest reliability ICC total score was good (ICC = 0.82 total score of subscales and varying range of subscales from 0.55 to 0.65)[43]. According to Williams et al[43] the OOAS is a valid tool that is suitable for assessing training on overdose management and naloxone administration. Like the OOKS, health care professionals had a significantly higher score on OOAS compared to their non-health care profession family members[43].

Section D used the Professional Quality of Life Scale (ProQOL version 5)[45] is a 30-item questionnaire using a multi-dimensional scale that includes the subscales compassion satisfaction (CS), burnout (BO), and secondary traumatic stress for professionals' (STS)[45]). ProQOL uses a 5-point Likert scale, with the response options:

- Never (1 points)
- Rarely (2 points)
- Sometimes (3 points)
- Often (4 points)
- Very often (5 points)[45]

Theoretical scores for each subscale range from 10 to 50 with a total score range from 50 to 150[45]. Higher scores on the CS subscale indicate greater satisfaction derived from work and higher scores on the BO or STS subscales suggest greater levels of distress or negative outcomes[45].

The ProQOL subscales measured by Cronbach's alpha has high reliability for CS (0.88), an acceptable level of reliability for BO (0.75), and good reliability with STS (0.81)[45]. The ProQoL is widely used and considered to have good construct validity supported by over 200 published papers and widespread use in research on compassion fatigue, secondary traumatic stress, and vicarious traumatization[45]. Inter-scale correlations show minimal shared variance between

CS and the BO and STS (r = -0.23, 2% shared variance with STS; r = -0.14, 5% shared variance with BO)[45]. Burnout and STS share 34% variance (r = 0.58), likely reflecting common distress[45]. However, the two scales remain distinct, as burnout does not measure fear, which is central to STS[45].

Section E included a modified version of the Workplace Violence Survey (WVS)[49] to assess whether participants had encountered any types of violence from patients or patients' relatives/friends in the past year[50]. The modified WVS is a 7-item questionnaire that is multi-dimensional with the subscales physical violence, verbal abuse, bullying/mobbing, sexual harassment, and psychological violence[50]. Each subscale measures distinct forms of violence experienced in the workplace using a 4-point Likert scale with the responses:

- None
- 1 time
- 2-3 times
- > 4 times[50]

The responses are reported in frequencies per category with higher frequencies indicating a greater prevalence of workplace violence[50]. The WVS used in Tian et al[50] is a 5-item questionnaire shown to have acceptable to good reliability with Cronbach's coefficient of 0.75 and 0.92 among health care workers (similar to our study's population) in China[46,50].

Section F consists of three open-ended questions developed by the research team, allowing participants to elaborate on any issues covered in the survey. Participants can also provide their contact information to be considered for an interview, and a gift card draw. The entire survey including sections A through F took most participants around 30 minutes to complete. Participants were also invited to provide their email address to be contacted to learn more about participating in a qualitative interview.

APPENDIX C - INTERVIEW GUIDE

We are planning to interview around 40 people across Alberta who are part of HSAA. In these interviews, we hope to learn more about how your work may be affected by the drug poisoning crisis.

Interviews will be conversational and open-ended; however, this interview guide will give some structure to the conversation. Researchers will ask follow-up questions, such as, 'can you tell me more about what you meant when you said…?' or 'can you expand on that?'

Introduction/Background

Please tell me about your professional role.

What got you interested in working in this position?

Drug Poisoning

What does your daily work look like? What is going well/ are the main challenges?

What kind of training or education have you had about opioids/overdoses/drug poisonings?

How has your work been changed by the drug poisoning/overdose crisis?

Did COVID-19 also seem to influence the drug poisoning crisis?

How has your role been affected?

Do you feel confident to respond to a drug poisoning?

Impact

What impact have these work changes/the drug poisoning crisis had on you personally?

What strategies do you use to manage these changes?

Have you been offered any formal support? Would you like any formal support? If no, why? What form might this take?

What strategies do you use to manage the impact of drug poisonings on you/ your work?

If the participant responds to drug poisonings regularly: Do you feel differently about clients after responding to repeated drug poisonings? (clients in general, not a specific person)

If the participant is in the mental health professionals group (addiction counsellors, psychologists, social workers): What resources are in place for you to manage the impact of this work?

Safety

Have you felt unsafe at work relating to drug poisonings? If yes, could you give me an example? Possible prompt about emotional or verbal abuse, if relevant
Have you sought out resources after experiencing abuse at work? Why/Why not?

We have talked about a lot of important things today, is there anything I missed or that you would like to share with me?

Closing

Thank the participant for their time and for sharing their valuable knowledge and experiences.

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