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Original qualitative research

Applying the Theoretical Domains Framework to identify police, fire, and paramedic preferences for accessing mental health care in a First Responder Operational Stress Injury Clinic: a qualitative study

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Abstract

Introduction: First responders and other public safety personnel (PSP; e.g. correctional workers, firefighters, paramedics, police, public safety communicators) are often exposed to events that have the potential to be psychologically traumatizing. Such exposures may contribute to poor mental health outcomes and a greater need to seek mental health care. However, a theoretically driven, structured qualitative study of barriers and facilitators of help-seeking behaviours has not yet been undertaken in this population. This study used the Theoretical Domains Framework (TDF) to identify and better understand critical barriers and facilitators of help-seeking and accessing mental health care for a planned First Responder Operational Stress Injury (OSI) clinic.

Methods: We conducted face-to-face, one-on-one semistructured interviews with 24 first responders (11 firefighters, five paramedics, and eight police officers), recruited using purposive and snowball sampling. Interviews were analyzed using deductive content analysis. The TDF guided study design, interview content, data collection, and analysis.

Results: The most reported barriers included concerns regarding confidentiality, lack of trust, cultural competency of clinicians, lack of clarity about the availability and accessibility of services, and stigma within first responder organizations. Key themes influencing help-seeking were classified into six of the TDF's 14 theoretical domains: environmental context and resources; knowledge; social influences; social/professional role and identity; emotion; and beliefs about consequences.

Conclusion: The results identified key actions that can be utilized to tailor interventions to encourage attendance at a First Responder OSI Clinic. Such approaches include providing transparency around confidentiality, policies to ensure greater cultural competency in all clinic staff, and clear descriptions of how to access care; routinely involving families; and addressing stigma.

Highlights

- To the best of our knowledge, this is the first theoretically driven, structured qualitative study using an implementation science determinant framework to systematically examine barriers and facilitators facing first responders and other public safety personnel trying to access a mental health service.
- Concern regarding the cultural competency of clinicians was identified as a significant barrier.
- Responding to calls involving individuals with mental health disorders may inform first responder attitudes and stigma towards psychological difficulties.
- Our results can assist in developing a model of care that may be broadly applicable to other first responder and public safety service providers across Canada.

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Introduction

First responders and other public safety personnel (PSP; e.g. correctional workers, firefighters, paramedics, police, public safety communicators)[1-3] are frequently exposed to potentially psychologically traumatic events, and at rates much higher than the general population.[4-8] This puts them at increased risk for mental health disorders, such as mood and anxiety disorders, substance misuse, and posttraumatic stress disorder (PTSD).[4,9-12] While prevalence estimates of mental health problems, suicidal ideation (12.5%–14.1%), and plans (4.1%–5.1%) vary among PSP, they significantly exceed the prevalence rate of 10.1% for diagnoses of any mental health disorder within the general population.[4,11,13-17] Among a large sample of Canadian PSP, 23.2% screened positive for current PTSD.[11] Nearly half of PSP also screened positive for symptoms of one or more mental health disorders.[11]

Many individuals who may benefit from mental health care may not engage or access care.[18,19] A World Health Organization study showed that a lack of perceived need for care and attitudinal barriers, mainly involving stigma, were the most common reasons for not getting help.[20] A systematic review on barriers to care and mental health stigma among first responders (a subset of the broader PSP category consisting of firefighters, paramedics, rescuers, and police[1]) identified concerns regarding confidentiality and potential negative career impacts as the most commonly reported stigma-related barriers.[21] Other barriers included scheduling issues and a lack of awareness of where to access care.

A study of Canadian first responders and other PSP thematically analyzed optional, open-ended responses within a more extensive online survey on mental health disorders.[22] A major theme was that PSP who sought care were felt to be "abusing the system," which acted as a barrier to treatment. A study of Canadian police officers' perceptions of mental health was conducted using semistructured interviews with 116 participants and included a self-report survey examining stigma, masculinities, and organizational culture in police services.[23] This study found that most respondents reported that stigma existed in their workplaces and that reporting mental illness was "high risk."

A qualitative study including 32 firefighters and paramedics in Arkansas assessed perceptions of mental health problems and engagement in mental health services.[24] The participants were selected through convenience sampling and had not accessed mental health services. This study found that barriers to accessing mental health care included a perception among respondents of being unable to show weakness, concerns regarding confidentiality, negative experiences with therapists, lack of access, and the need to protect their families from the traumas of the profession for fear of burdening them. Facilitators to accessing care included feeling they were not alone, having positive experiences with therapists, receiving recommendations from others, and family, friends, or administrators noticing an increase in the severity of problems.

Another qualitative study of 48 US police officers, half of whom had accessed mental health services, asked how and why they had engaged with help.[25] The study predominantly focussed on organizational strategies to encourage mental health care. The main findings included preventing negative consequences, removing stigma in the workplace, and developing treatment that was viewed as relevant and trustworthy.

Although the studies we reviewed above were helpful in beginning to identify barriers and facilitators among first responders, few previous studies have focussed on preferences for help-seeking and accessing mental health care. These studies were also somewhat limited in that they were not systematic in their efforts and did not use integrative theoretical frameworks. We are not aware of any previous studies that have used an implementation science framework to facilitate the development and implementation of mental health–related services in occupational health settings or specifically for first responders. Nor did these studies employ a theory-driven, systematic approach to removing barriers to care. Therefore, we conducted our study to determine how best to provide acceptable and accessible mental health care to first responders. Specifically, we wanted to determine what factors would encourage first responders to access mental health care. To address this question, we used the Theoretical Domains Framework (TDF)[26] to guide all aspects of this research to determine, if a First Responder Operational Stress Injury (OSI) Clinic were available, what factors might encourage or discourage first responders from accessing this resource. This study is part of a broader research program to deliver effective mental health services for first responders. Information regarding the conceptualization, refinement, and validation of the TDF have been presented elsewhere.[27,28]

The TDF is an influential framework derived from the synthesis of 33 theories of behaviour and behaviour change[26-28] that systematically addresses fundamental barriers and facilitators to behaviour change.[26,29] This framework was chosen as it could target a specific behaviour (accessing mental health care) while accounting for the setting in which the potential intervention (a First Responder OSI Clinic) is being implemented.[26,30] The TDF can also generate theoretically informed targets for interventions and increases the chances that the study results can be replicated and are transferable.

This study included the prospective application of the 14 domains of the TDF, which provide a clear and comprehensive consolidation of influences of behaviour that are rooted in techniques of behaviour change and behavioural theories, in order to inform the clinic's implementation.[26,27] The objective of the study was to identify critical barriers and facilitators impacting first responders' help-seeking behaviour and access to mental health care to inform the development, implementation, and long-term sustainability of the First Responder OSI Clinic.

Methods

Ethics approval and consent to participate

Ethics approval was granted by the Ottawa Health Science Network Research Ethics Board at The Ottawa Hospital (reference number: 20180903-01H). Written informed consent was obtained from all participants.

Design

This qualitative study used semistructured, one-on-one interviews, based on the TDF,

with a sample of first responders from the City of Ottawa's tri-services (Ottawa Fire Service, Ottawa Paramedic Service, and Ottawa Police Service), in Ontario, Canada.

Participants

Participants were recruited in the city of Ottawa, which has a population of approximately one million,[31] and had approximately 3581 municipal first responders (1537 career and paid volunteer firefighters, 564 paramedics, and 1480 sworn police officers) during the study period. Eligible participants were firefighters, paramedics, and police officers from the City of Ottawa's tri-services. Individuals who were not currently employed by one of the services, including retirees, those on long-term disability, and those younger than 18 years were not eligible.

Participant recruitment and dissemination of study-related information were facilitated by accessing established networks in Ottawa's first responder communities (e.g. peer support groups within the tri-services and the First Responder Mental Health Network Collaboration). Five first responders known to the research team were initially approached to participate in this study. A snowball sampling technique was then used to identify additional potential participants. Participants were purposively sampled to capture a broad range of experiences related to help-seeking and accessing mental health care.

Participants identified through purposive sampling were invited to suggest frontline first responders who had previously sought treatment for a mental health disorder or were members of their respective peer support group. Participants were also invited to suggest others who had experienced poor mental health and had not attended treatment, in addition to soliciting the perspectives of first responders who disagreed with the clinic's implementation or held conflicting beliefs regarding the clinic. The intent was to further extend the range of potential experiences and perceptions captured in the sample. Participating services provided the option of compensating time for members to engage in the interviews. We added participants from each service until data saturation was reached and then completed three more interviews per existing recommendations.[32,33]

Interview guide

The behaviour of interest was potential attendance at a First Responder OSI Clinic. Study team members had significant clinical (SH, RNC) and research experience (VT, RNC, IC, DF, AH, SL, MJH, SH) with first responder populations. Some of the authors had previously worked with first responders, military, and Veteran populations (VT, RNC, IC, DF, AH, SL, MJH, ZC, SH); two of the authors are paramedics (SL is a Commander and an Advanced Care Paramedic, and ZC is a Primary Care Paramedic); and one is a Veteran (AH). The paramedic portion of this study forms part of the first author's (VT) master's thesis, of which JJ was the primary supervisor. The team collaborated to develop a semistructured interview guide[34] based on the 14 domains of the TDF.[26,27] The interview guide was designed to assess the perspectives of frontline first responders, and interview questions prompted reflection and identification of key beliefs about the behaviour for each TDF domain and details about how each domain affected the behaviour. Probing questions were then used to explore details in further depth.

Procedure

The semistructured, face-to-face interviews were conducted individually from June to October 2019 and lasted between 36 and 156 minutes (M = 96.59, SD = 33). The interviews (by VT and AB) took place at times and locations most convenient for participants and where confidentiality could be maintained. Audio of all interviews was recorded and later transcribed by an external professional transcription company and were de-identified.* All transcripts were then assessed by the respective interviewer (VT, AB) for transcription fidelity. The Consolidated Criteria for Reporting Qualitative Research[35] checklist guided the reporting of this qualitative research.

Analysis

All interviews were analyzed using NVivo 12 Pro[36] software and guided by content analysis recommendations.[37,38] No additional TDF domains were identified after reviewing the transcripts and independently coding an interview transcript. A coding guideline was developed, including definitions for TDF domains and constructs, and applied examples. Independent coders (VT, AB, ZC, PB, JM) used a directional approach to content analysis[39] and each interview transcript was coded by two independent coders. Each utterance (i.e. bit of spoken language) was coded into the relevant TDF domain(s) and was guided by the coders' understanding of the TDF and relevant domain(s)[40] in NVivo. Coding differences were resolved by discussion. The coding was supervised by SH, who acted as the third-party reviewer to consult as an arbitrator if consensus could not be reached. Coders linked responses with specific beliefs that appeared in one or more transcripts to generate belief statements. The statements were intended to capture the core thoughts expressed by participants,[40-42] which were used to provide insight into the perceived role of the TDF domain in influencing behaviour.

Transcripts were analyzed separately for police, fire, and paramedics. Data analysis revealed that data saturation was reached within the 24 interviews. Verification of whether thematic saturation was reached was determined when no new barriers or facilitators were produced on help-seeking and accessing mental health care, signalling that there were no new themes, findings, concepts, or problems.[43]

Domains likely to explain attendance at a First Responder OSI Clinic were identified by frequency of specific beliefs across transcripts, occurrence of conflicting beliefs that would indicate variation in first responder behaviour, and evidence of strong beliefs affecting the behaviour.[26,40,42,44]

Results

Participants

Participants included 24 first responders (70.8% men) across the three sectors; the remainder of the sample included participants who self-identified as female or as nonbinary (Table 1).

The proportion of women who engaged in the study was in line with the gender demographics in frontline first responder roles in the tri-services in Ottawa. The high proportion of men to women in these

* Transcribed data presented as illustrative quotes (in the Results and in Table 2) have been minimally edited to remove details such as position and details of trauma, as they were particular to individuals and could potentially identify them.

TABLE 1
Demographic characteristics of first responder participants in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Demographic characteristics	N	(%)
Gender		
Female	6	(25.0)
Male	17	(70.8)
Nonbinary	1	(4.2)
Occupational group		
Firefighters	11	(45.8)
Paramedics	5	(20.8)
Police	8	(33.3)
Mean age, in years (SD)		
Firefighters	42.5 (10.9)	
Paramedics	40.4 (9.8)	
Police	49.5 (7.1)	
Total	44.4 (9.9)	
Primary subgroup		
Sought treatment for a mental health disorder	12	(50.0)
Peer support member	9	(37.5)
Frontline member (who was not a member of peer support or had not sought treatment)	3	(12.5)

Abbreviation: SD, standard deviation.

sectors differs based on occupation type and level of seniority. For example, at the time of this study, approximately 30% of frontline paramedics were women. The paramedic service had the highest proportion of women within the tri-services.

A total of 3619 utterances from 24 interviews were coded into the 14 domains. Key themes from the interviews were clustered into six of the 14 theoretical domains: environmental context and resources; knowledge; social influences; social/professional role and identity; emotion; and beliefs about consequences (Table 2).

Environmental context and resources

All first responders declared their interest in and support for an OSI clinic; however, several significant barriers to help-seeking and accessing mental health care were identified. All first responders emphasized the need for the clinic to protect their confidentiality, particularly from their colleagues and management. Arranging for individual first responders to go into the clinic alone and speak to their clinician directly, without interaction with other staff members, was one suggestion for accomplishing this. Police participants especially emphasized fear of being exposed while accessing mental health care. The clinic's location was also considered important for supporting confidentiality. Participants stated it should not be located at or near any hospitals with emergency departments where first responders are known in their professional capacity: "I'm using the word 'covert' … I don't know how you set that up, and whether you're feeding into the stereotype … that doesn't matter at this point. We have to keep this now as it starts to open up very, very private" (Firefighter 3).

All participants indicated uniforms could be triggering for first responders. However, there were conflicting opinions about making the clinic uniform-free. Firefighters and paramedics agreed that the clinic should be uniform-free, citing the benefits of avoiding potential triggering cues; differentiating between work and personal time; removing identifiers and protecting confidentiality; and reducing the impact of rank. Other paramedic participants indicated that a uniform-free environment might create a barrier for clients who need to attend appointments while on shift, necessitating multiple clothing changes. Police also indicated that a uniform-free environment might be a barrier when attending appointments while on duty because of specific vocational requirements, such as acting in their capacity as police officers while on duty.

Participants also expressed frustration about the lack of continuity of available services. Participants reported that the currently available internal and external resources, including their respective Employee Assistance Programs (EAP) and the Workplace Safety and Insurance Board, are difficult to navigate, unavailable when needed, and insufficient, as the clinicians within these programs are not well trained to address the specific needs of first responders. A one-size-fits-all approach for EAP designed for all employees within a municipality was repeatedly described as insufficiently culturally sensitive: "EAP, they don't have a clue … when you start calling them with our kind of stuff, they're not interested in hearing that because [the] last thing you want to hear is something about an 8-month old dead baby floating in a bathtub" (Paramedic 2). Police reported that because they have access to unlimited coverage for psychological services, they could access more appropriate care as a function of having the ability to choose their clinicians.

Knowledge

All participants indicated that specialized clinicians for first responders need to have sector-specific knowledge of the workplace and first responders' roles (i.e. cultural competence). The knowledge domain here refers to the clinician's knowledge. Suggestions for developing cultural competence, the process by which individuals and systems respectfully and effectively respond, can be strengthened by developing sector-specific knowledge such as going on multiple ride-alongs within each service, spending time in the workplace observing the day-to-day stressors, and learning the terminology.

Several participants described learning first responder terminology as important for effective communication. "[Clinicians] should be aware of the culture.… Just because we're all first responders does not mean we're all the same.… They have to be: (a) aware of the culture; (b) … of the language that we use … and what kind of stress that first responders are under in their respective fields" (Firefighter 9).

Some firefighters and police officers suggested that having clinicians who are former first responders would be beneficial: "It would be beneficial to have police officers who are counsellors, psychologists, or social workers … so that they can relate … when we're speaking as a police officer, and nobody really knows what it's like" (Police 1). Police officers reported that clinicians who have prior experience

TABLE 2
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
Environmental context and resources	**A first responder clinic should protect clients' confidentiality**	"You could tell them what room they're going to be in, so they could just go directly to the room, as opposed to waiting in a lobby … because I think some of them are maybe embarrassed about doing it in the first place." (F5)	7	[What could facilitate accessing mental health care?] "Knowing that the confidentiality is there, that your workplace won't know about it if they don't need to." (PA5)	3	"If you put it in with a lot of other facilities … it increases the anonymity of the reasons why officers or members may want to go there. So, it's not necessarily identified that, oh, so and so is walking to this one lone house or building and that's the OSI Clinic and everybody goes.… If you have a standalone [clinic], then it's very easily the confidentiality goes down.… If you put it into … a City of Ottawa site or facility whereby there's lots of other things going on, it increases your anonymity." (P2)	7
	The first responder clinic should be uniform-free	"You want to be as anonymous as possible.… If you're walking in there in a uniform, you're straight up identifying yourself … it should just be as anonymous as possible. I think if you had everybody show up in normal civilian clothing, it would keep some anonymity to it.… Especially, if you're in the hall, you're in the waiting room … and I see there's a paramedic there. If we're in uniform, we'll recognize each other…" (F6)	9	[uniform-free?] "I think that would probably be best, the reason being, depending on how it's set up, there's a good chance you will probably run into somebody you may know, and a uniform might not be what they need to see that day. It may not bode well … they might be okay with you, especially if you're still at work and seeking help for anxiety that's one thing, but if you're then crossing paths with someone who never wants to see a uniform again, may not be a good idea. So, I think more for the protection of kind of others." (PA5)	5	"We've had officers have their guns taken away. So, if they're coming to you for assistance, I don't think they should be in a uniform. If they're on duty, I get it … they're coming here for an hour, fine. Leave the uniform on, take away the gun. If you're off duty, then there's no need for the uniform. You shouldn't be in uniform anyways, unless you're going to work. And then again, your firearm should be at work." (P4)	4
		—		"If it's uniform-free then it takes away any identifiers … there are people that can't even set foot into our headquarters … having it uniform-free might be a good idea … a con to that is if someone was coming during their shift … how would that work for that person? … either or but you would hate to trigger someone that's there if someone else came in uniform." (PA4)		"If a first responder's having a bad day or had a bad call … why not have that option that they can show up [in uniform]? ... It's important that your folks and the members that are accessing this clinic have an understanding that yeah, uniforms may happen. Some people have a real negative reaction to uniforms as a result of moral injuries on the job… That could be triggering, as you know. So, I think if people that are going to be accessing it are given that heads-up [there may be uniforms]." (P2)	

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TABLE 2 (continued)
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Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
		—		"I think it should be uniform-free. As soon as you start wearing a uniform there's ranks visible and that may change people's perception … everyone's on the same level playing field." (PA2)		"If you start saying you can't bring your gun in while you're working in uniform, that's going to be a problem, because if you have a concern for someone being armed in there, then that concern should be brought to the organization to say they shouldn't be armed. And that doesn't breach confidentiality, but that's a careful thing that might screw your program … most people that are going to be coming and using your service are probably going to be off work …" (P6)	
	Current mental health services available to first responders may be inadequate, and service providers may not be well equipped or trained to address their specific needs	"The City has EAP [employee assistance program] … for EMS [emergency medical services] and fire based on a budget that they receive … we've had pretty good response from the membership that individuals have sought out marriage counselling, addictions, financial guidance.… But any time you get into anything a little bit more meat and potatoes… mental health … it fell so grossly short." (F10)	5	"When I called to talk to EAP … I think it was like 3 to 4 weeks before I could get in … and then when I did see that counsellor … she was traumatized by what I was telling her and I'm like okay, this did not go as planned. So, I never went back. I felt so bad for having done that. I thought it was a place where I could go …" (PA4)	5	"I've heard so many horror stories of officers going to see EAP and their counsellors … We've come a long way.… I've heard stories of counsellors being … in tears because the cops are telling them this is what I'm dealing with and they're almost like throwing up their hands—I don't know what to do with you." (P2)	4
		"I've personally gone to EAP for help before, and I've never went back after the first visit … they were totally useless for me … in my session, basically they said, 'Yeah, I don't know anything about that. You should go see a good professional.'" (F9)		"In my experience, and I'm going to be blunt, EAP is a joke. You get three sessions. This is not a broken bone. You can't fix it right away. It takes time. It takes a relationship. Fixing something in three sessions is ridiculous." (PA3)		[Ottawa police have unlimited coverage for psychological services in their benefits] "The great thing with Ottawa Police right now is we have unlimited psych in our benefits, and the great thing about that is you can pick who you want to pick.… And you should be able to pick which doctors." (P6)	

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TABLE 2 (continued)
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Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
	Therapists at a first responder clinic should be educated and have knowledge of the working conditions of first responders	"I don't need somebody wanting to listen with enthusiasm … having the right people in the right place and aware of what we are, and who we are, what kind of our special needs are … that's not something that an individual's going to necessarily pick up on a half-day session at the training centre …" (F10)	10	"… for that simple fact that you're not traumatizing them … I went to see a counsellor and was telling them about a call.… I left there feeling like I had traumatized her, and she was so upset.… She had no clue how to help me … you don't want the person who's there to seek help [to] feel like they injured somebody that's trying to help." (PA4)	5	"When they come on the ride-a-long … I'm [therapist] here to learn. I'm not here to analyze you … they hear the lingo … and they give you that idea of maybe they're just telling a story and then when we interject 10 f-bombs, it's not bravado, it's maybe a way of coping because we use humour. Sometimes we use it inappropriately, but when it's used within the confines of our police family or people, it's not derogatory, but it's helping us cope … especially in the moment ... having a little understanding of that and maybe a little patience for it would help … training somebody to deal specifically with this, they probably need to be exposed to all of it … ride-a-longs with the police and then they spend a lot of time with the medics and … with the firefighters …" (P7)	8
		—		"A significant one is understanding the job, so familiarity with a particular role and the stresses related to that role. I have worked with mental health professionals of all backgrounds who it's very quickly obvious that they don't quite understand the pressures and the needs and the day-to-day life of a paramedic. It's very difficult to relate, and that can be anywhere from shift work to end of life care …" (PA3)		"Credibility is going to be huge. I would rather go to the doctor who's had lots of experience with first responders … they should go to our PDC [Professional Development Centre] and go through some of the use of force scenarios … the more you become part of us and part of that family, so I would encourage them to go on ride-a-longs." (P6)	
	A first responder clinic should be discreet and not located at a hospital with an emergency department	"… NDMC [National Defence Medical Centre], I think it would be fine, because I think it's a neutral location.... Parking is open, easy, huge parking lot, and it's neutral ground ... it's not a clinic anymore. It's not a hospital anymore. It's an administrative building … it would be a good spot." (F9)	6	"If it's at the General or the Civic, we see too many of our colleagues walking around … I walk past how many people that I know from emerge [emergency department] or my own colleagues from there [see] me coming in. When you see somebody in civies at the hospital, [it's like] 'Hey what [are] you doing? What [are] you up to?' 'Oh, I'm going up to the OSI Clinic.' 'Oh.' And then we're back to stigma, right?" (PA2)	5	"I would like a bricks and mortar facility someplace, centrally located that is nondescript, that is not attached to any hospitals but is affiliated with a hospital.… My people will never walk into a mental health hospital to receive care.… If you have a nondescript building that's centrally located someplace, with ample parking … they can walk in and they can see a friendly face, potentially a peer support coordinator or people they get to know, and they're welcome there and that's where they get their treatment … it's not sterile and it's not hospital-like and it's certainly not a bunch of people with lab coats walking around … That is not going to go over well with my people, because they don't see themselves as crazy, right? Or they're afraid of people labelling them 'crazy' …" (P8)	7

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TABLE 2 (continued)
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Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
		—		"… a safe place … [where] we're not going to run into patients that we've picked up on the road." (PA4)		"You've got to be going to a place where it's going to be safe and that you feel I'm not going to be exposed. One of the big risks for me in stuff like that, and others, is who am I going to bump into when I go to your clinic? Who's going to know?" (P6)	
Knowledge	**It is important for clinicians to have knowledge of the culture and working environment of first responders**	"We have, and I think EMS [emergency medical services] and police have similar type things … what we call 'Fire Ops 101' … [it] was developed [for] media, politicians that sort of stuff. It's grassroots … bring them in and show them what it's really like. We put them in the bunker gear … we take them into the burn building and they get to put out a mock car fire, but they get to feel what the heat's like …" (F10)	9	"… learning the lingo, it would be great, too, if they were able to come for some ride-outs in our workplace to see like what we face every day, either the challenges of the calls or … of shift work … of not eating, challenging just the constant go, go, go, not being able to finish paperwork … having that firsthand experience to be like 'Oh yeah, I know what they're talking about now.'" (PA4)	2	"The big approach is the exposure.… It doesn't have to just be on the road. It could be … you guys are going to come down and they're going to run you through our use of force day … so you get to do the scenarios and you get to do the decision-making scenarios where it's are you going to shoot or are you not going to shoot? … The decision-making made under duress and say like, 'Okay, I get that. I was really scared' because you've never been exposed to it and 'I shot that guy because I was scared.' 'Well, he was just drinking a bottle of wine on a corner and you shot him.' (P7)	8
		"Then, those clinicians talk to each other, and they share their experiences. 'Wow. Okay, that makes sense.' They'll start speaking their language. 'I saw this, and I saw this. This team I spent the day with told me this, and this police officer I spent the day with told me this, and these two paramedics I spent the day with told me this.' Now, all these clinicians are going to have a much better understanding …" (F8)		"One of the things that attracts me to the idea of this program … is that you'll have people who … they really deal with a lot of first responders and the types of problems that we have, so they become more proficient in it. So, you don't have to do catch up all the time … I can explain this particular aspect of my job and they'll know what I'm talking about right away. And I know that takes time, but that's really good. That's huge." (PA3)		—	
	First responders are good at responding to the initial traumatic event, but not the long-term consequences	—	—	"You just turn it [emotions] off, and you've got a job to do.… Unfortunately, when I realized it was too late … it took me a long time to get unstuck to get to the point where I could sit with a feeling or an emotion, process it, figure out what I wanted to do." (PA2)	2	"We often ignore the snowball effect of a traumatic event. We're great at responding to the initial incident and the people right there, but even just take first responders aside. Well, who is supporting the children and husband of that woman who lost her legs? Who is supporting the wife and kids of the first responder who first dealt with that woman who lost her legs?" (P6)	1

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TABLE 2 (continued)
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
		—		"I wasn't aware that I was sick until I was deep. And only when I hit what I would call rock bottom, did I seek help and then I started noticing. It's amazing how—at least in my situation—I could delude myself, or just kind of tread water. And it's only in hindsight, so I have significant amount of respect for the ability to be unhealthy and not know it." (PA3)		—	
	First responders can often notice warning signs in their colleagues when they are struggling with their mental health	"When other people look at you, they see those changes, but yet they don't know what it is, because they're not educated…. It presents itself as somebody isolating themselves socially, locking themselves up in the basement … anger. It can present itself as irritation. It can present itself as addictions, and yet the person might not even realize what's going on. I've heard that from so many different people who have gone through this ... I didn't realize I was irritated, or irritable … or angry, or judgmental." (F9)	8	"Attendance is a big indicator. Mood, so irritability; isolation is a huge thing. So, somebody stops coming out and somebody stops doing the things that they enjoy. Fear, people expressing fear. Almost fear to go to work. Fear of making a mistake, just expressing very fearful sentiments… Affected home life, home relationships, so my colleague takes me aside and starts talking about how home life has been affected is a big sign; poor memory, apathy." (PA3)	5	"I'm quite aware of the symptoms of mental illness … how it presents itself sort of day to day, and the anger, the withdrawing from family and friends outside of policing and sort of latching onto the police family instead … withdrawing from outside of work, drinking … your common overuse is alcohol, spending money … not getting enough sleep or time with your family … those are very common symptoms of stress or … coping or inability to cope … being withdrawn, angry … I've had training in recognizing it, it stands out to me very clearly.… I see someone who comes in with a big rant about something ridiculous that people shouldn't rant about … I recognize that in hindsight, in myself years ago when I was stressed and I didn't see it that way …" (P3)	7
	Peer support work provides a base knowledge of mental health, which can be built upon with experience	"Most of my formal training has been through peer support, and there's been some mental health [training]—a program they ran through the fire service, Road to Mental Readiness …" (F3)	4	"I'm not a mental health professional, but I've had additional training and I've been doing my role for five years … so I've had lots of hands-on experience." (PA5)	2	"I've taken the Mental Health First Aid. I am a R2MR [Road to Mental Readiness] instructor which deals with all sorts of mental health issues … attended the Canadian and mental health veterans … I've presented lots … I don't diagnose anybody.… But I feel that I have a greater grasp on okay, how serious is this issue that we're dealing with? … I feel I have a grasp of that … when I first started this job two years ago, I would say it was limited and I was definitely questioning why they hired me because I'm not a psychologist. I have a couple of courses at university level in psychology.… I didn't feel that I was confident in [it] … it's a start, right? It's a finger in the dike as the whole dam is exploding around you. That's basically how it feels like at times …" (P8)	1

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TABLE 2 (continued)
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
Social influences	**Stigma prevents people from speaking freely about their emotions**	"There's still a limit to the depth that we're pushing into the stigma … we've scratched the scab off a little bit, but it's about getting in deeper sort of thing and we're not truly stigma-free until really everybody can stand up and seek the help when they need to seek the help." (F10)	9	"I think it's certainly getting better, but there is a generalized fear, whether that fear's based in reality or not, I don't know, but it's a generalized fear that people will judge you as weak, or not a competent medic, or dangerous to other patients. That's a huge factor." (PA3)	5	"A lot of people are very hesitant to use the words mental health … because the problem is when we deal with mental health, as a police officer, you're dealing with 3 to 5 percent of the population that have had zero supports in their life that are usually heavily drug addicted and they turn to a life of crime and they have severe mental health problems that have never been addressed … we deal with them as homeless and in shelters … [when] we get called, they're usually at the end of their rope and they are brandishing weapons and they're trying to hurt us, and so that's what is left as an impression of mental health on officer's minds that you're crazy … there is a big us and them type of thing." (P8)	8
		"It [stigma] was almost as traumatic as the call that we went on, because you're basically being asked to strip naked in front of a bunch of people that you don't know." (F4)		—		"There's a very historically strong police culture related to never showing weakness and being very stoic and always having to be in control." (P3)	
		"We deal with our own problems … especially the kind of old school, 'You just don't talk about stuff.' 'You have a problem, you bottle it up, you shut up, and it will go away.' … 'You just deal with it on your own.' … I've only been on the job five years, and I notice it's changing … it's changing because it has to change …" (F6)		—		"I'm off. I need sick leave. I need time … but I'm afraid to go and ask for time off. Well, why is that? … It's because my supervisor has already made comments about so and so being off for "issues" or an operational issue … because of a bad call. And so, they get that somehow this is maybe an operational stress injury that might need some support. Now it's also managerial stigma issue …" (P2)	
	Struggling with your mental health can be an isolating experience	"They don't know who to talk to about it, and they feel isolated. They feel alone, and then that's where that social withdrawal comes into play.… You realize you can't really talk to anybody about it, because you know that they can't relate or understand it." (F9)	5	"One of the most cathartic things that I experienced during my journey was multiple professionals saying 'No, this is normal,' 'people go through this,' or 'you're not alone.' You're not the only one, and that really helps in terms of feeling like you're isolated and you're fighting this all on your own." (PA3)	2	"When people are suffering, they feel very isolated, they feel very alone, they have no idea how they're ever going to get better and I've actually seen where they're just sitting in their basement smoking cigarettes and they're obviously not living any type of life … their marriage usually implodes, their kids hate them. They'll never come to work." (P8)	4

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TABLE 2 (continued)
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
		—		—		"One of the greatest stumbling blocks from a police perspective is you don't want to be seen as weak, and so you take it all in and you actually feel alienated because you think you're the only one that feels like that." (P5)	
	People struggling with their mental health may be perceived as weak	"Some [platoon chiefs] are very proactive and are very serious about mental health … then there's other platoon chiefs that are old fashioned, 'Suck it up buttercup.' There's captains out there I know very well that are, 'What are you, a wimp?' There's still that mentality for sure." (F9)	6	"I still think there's a significant contingent of paramedics who may not believe it … and the little quips and the verbiage expresses a belief that if you suffer from mental stress, you're weak, and that you can't do your job." (PA3)	4	"[Mental health problems] are very present, but they are also seen as a sign of weakness. So quite often, the people that I have worked with that have manifested with a mental illness, by the time it comes to light, it's advanced." (P5)	4
		"Whenever I come back from a call, with everybody in the room, not everybody's there, but they all make a joke about, 'Oh, this guy's suffering this little bit, he should be stronger.' There's always comments like that going on, and it makes you feel like, 'I'm not going to say anything, because he might make fun of me.'" (F1)		"It's very hard to change the mentality to put your hand up and say, 'Hey look. No, I need to stop here for a second.' Medics look at it as a sign of weakness. Medics will ridicule it and make fun of it." (PA2)		"I wouldn't ever want to show any kind of weakness or vulnerability at work … if there was ever kind of a crazy call or a scary call or something that I was uncomfortable with … I'd never wanted to show any kind of weakness to that.… I would have definitely early in my career bottled things up, not shared my vulnerabilities, not spoken about my emotions, never share that at work." (P3)	
	Women in first responder sectors face social barriers that men do not	—	1	"As a woman … it's harder for us to cry or to ask for help because we're going to ultimately [be] seen as weak or PMS'ing. I was told that before …'Are you PMS'ing?'… I just had somebody die. Like, I feel like it's completely unrelated … I feel like, as a woman, we have to look a bit harder than we are because they take advantage of us." (P1)	1	"It was always the pressure of getting the work done because that was your role and that's your job, and that's what you're being paid to do and it's the right thing to do, but also not wanting to show any kind of weakness or vulnerability because I was a female officer in the traditionally big tough boys' role, you know, male role." (P3)	2

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TABLE 2 (continued)
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
Social/ professional role and identity	**First responders feel they have a duty to work, regardless of how they are feeling**	"You kind of do … at the same time, too, you also know that [if] somebody in another job was having a bad day. They're battling depression … And it's like things just are not good today, I can't make it into work. We don't have that option." (F10)	1	"Make it or fake it, that's our world.… My job on the road is to turn that off to do my job to the best of my abilities and not let those outside stressors and all those things get to me … police and fire, exact same … when it comes down to doing their job, they do their job to the best of their abilities, and they will make it or they'll fake it.… We deal with the consequences after." (PA2)	3	—	
	The stigma of being seen by peers may prevent first responders from seeking care at a first responder mental health clinic	"This person said to me, "Oh, I don't want to go to a clinic, because I don't want anyone knowing that I'm dealing with something.'" (F7)	7	"Take away everything they could be uncertain about. Am I going to meet somebody I know? That's a big one.… Basically, if you can give them enough upfront information that doesn't overwhelm them … like there's 15 minutes between appointments so you're not going to run into anyone." (PA5)	3	"I've made the decision. I'm going to seek help. One of the worst things I can think of is somebody's going to see me. If you were to schedule people in such a way so that they never meet there's an in-door and an out door … I walk in through the front. I'm immediately shuffled back to where I'm going to be meeting with my mental health professional. I have my meeting and then they show me the back door." (P5)	7
		—		"A lot of times when people come to this type of clinic or they seek this type of help, anonymity is very important to them at that moment … speaking from my experience, it's a very vulnerable moment … seeing somebody that they know or have a professional relationship with or even a social relationship with, can actually scare them away, or would scare them away." (PA3)		"The concern that officers might think that they have mental health problems, and they have a weak mind or they're not capable of doing their job is probably the number one fear.… It's about giving/showing any signs or raising any flags that you are accessing them … it's the exposure of you accessing them to other members of the public and to your colleagues." (P1)	

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TABLE 2 (continued)
Summary of relevant TDF domains and sample quotes from first responders in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

Domains	Belief statements	Fire		Paramedics		Police	
		Sample quotes	Frequency (out of 11)	Sample quotes	Frequency (out of 5)	Sample quotes	Frequency (out of 8)
Emotion	**Emotional and physical impacts of stress and trauma (i.e. physical manifestations—poor sleep, decreased energy)**	"It can present itself as anger. It can present itself as irritation. It can present itself as addictions, and yet the person might not even realize what's going on. I've heard that from so many different people who have gone through this firsthand, and including myself …" (F9)	8	"Until I started my treatment … every time I would hear a hanging call, I was physically sick to my stomach." (PA1)	2	"This affects sleep. It affects alertness, irritability, compassion, empathy … fatigue and ethics, sleep, so it increases your fatigue, ability to interact as far as socially, isolation through the roof … drowsiness, work functionality and alertness at work, dependence issues on them, sex drive, intimacy … desire just to even be open to people because you're so fatigued." (P2)	7
Beliefs about consequences	**Involving spouses or family at the right time in mental health treatment can have beneficial outcomes**	"Where a family can be involved, I think it's really important … it's the partner or the spouse that can keep people honest during treatment and going through a treatment protocol. There's accountability there." (F10)	10	"[Bettering themselves] it's hard to do if they don't have the support of the family … there needs to be maybe an education piece … why we're doing CBT [cognitive behavioural therapy] … or how to support your person while going through this." (PA3)	5	"It is the all-encompassing. I know that what affects the individual will affect their family, and we have those ripples in the water." (P8)	6
		"I don't know if I'd be here if it wasn't for my family … that's what kept me going.… I know so many guys who have lost their wives, their marriages over this and everything else, and those are the guys who struggle more than anybody, because they're alone.… Have their parents, have their spouses, bring your best friend in … spend the day talking about mental health … the people who are going to be a part of your life are going to learn about it … they're going be the people who are going to influence change in you." (F2)		"I think in two different ways, one being that you could bring them into specific sessions, and then also having just information sessions is really valuable … when I went away for treatments, they offered a 2-day course for my spouse to go, where they explained basically PTSD [posttraumatic stress disorder]. They broke it down and they explained what to look for, typical behaviours, that type of stuff and she felt she could relate better, she felt more empowered. And my ability to talk to her about it greatly improved." (PA3)			

Abbreviations: F, firefighter; P, police officer; PA, paramedic.

Notes: The qualitative datasets generated during and/or analyzed during the present study are not available for sharing. Ethical approval for the current study prevents data sharing.

as police would prevent content from being "lost in translation." Several participants also indicated that non-clinical staff who interact with first responders need to be culturally competent, including staff answering the phone. Participants also discussed first-hand experiences and knowledge of colleagues who felt they had caused clinicians psychological harm by describing their experiences, reinforcing the importance of cultural competence in ensuring that clinicians who work with first responders are knowledgeable of the sector's respective culture and vocations:

> I realized that he's [the clinician] not the guy I should be talking to because I watched him turn white on one of my calls and I'm looking at him and going it's not that big of a call, trust me. And I realized, no, I have to talk to people that know what they're doing. (Paramedic 2)

> You're looking at some pictures and a video, and you can't even stomach it. How are you supposed to treat these people who have been through it firsthand and offer some compassion and understanding? (Police 6)

Police, firefighters, and paramedics demonstrated some mental health literacy skills by recognizing warning signs of mental health challenges in their colleagues. However, some also reported feeling unable to identify specific next steps to provide effective help. Enhancing knowledge about how to help was identified as an opportunity for improving mental health. Paramedics indicated that members of their profession know how to hide mental health symptoms (e.g. substance abuse), making supporting peers difficult:

> One of the biggest challenges I've had is the comorbidity in terms of mental health with addictions, because I find our colleagues are better at hiding the addictions aspect of it than maybe the anxiety, the depression, the other stuff … that's been the biggest surprise to me … I find the addiction has blindsided me in the past that there's this going on as well, and it's been surprising. (Paramedic 5)

Participants described that working as a paramedic involves repeatedly responding to mental health calls, which creates a culture of not wanting people to know about mental health challenges and hiding mental health symptoms for fear of being seen as similar to their patients.

Police and paramedics indicated that first responders are good at initial responses to traumatic events but often lack the knowledge and skills to manage long-term mental health consequences. The absence of these skills was cited as a barrier to help-seeking and identified as an opportunity for improving mental health.

Participants cited lack of clarity regarding sick leave entitlements and employment-related discrimination as barriers to help-seeking. There was also uncertainty about the process of taking leave. Paramedics reported confusion about how many sick days were available and feared being reprimanded for using more than four sick days within six months. A paramedic reported that their interpretation of the sick leave policy included a requirement for a meeting to be held with the paramedic, Supervisor, Commander, and union representative in the case of paramedics who took more than four sick days in six months. Paramedic participants also raised concerns about employment-related discrimination (e.g. limits to career advancement) for taking more than 14 sick days in a year.

Peer supporters from all three services agreed that peer support team members should engage in training surrounding mental health, well-being, and self-care, providing a base knowledge of mental health, which experience can further build upon. However, participants reported varying levels of access to internal and external training opportunities (e.g. mental health training programs, conferences, and information sessions on PTSD). All participants described peer support as a beneficial resource, but not all participants reported feeling comfortable accessing peer support for mental health problems.

Social influences

All participants reported instances of self-stigma and label avoidance, often illustrated by their descriptions of fear of being perceived as weak for either needing or seeking mental health care. Stigma in firefighters was explained as a reluctance to speak freely about their mental health. Paramedics reported that public stigma is deeply entrenched in their work environment. For example, they reported observing instances of colleagues making fun of or ridiculing those with mental health problems and those who talk about or attempt suicide:

> If it's something like a suicide attempt or suicide ideation … that's still a huge stigma within our organization, especially because we deal with patients who have suicidal ideation pretty close to every shift … we're, I hate to say, critical of our patients when they don't succeed. It sounds awful, but we're like, "You know, this is the fourth time I've picked you up. Haven't you figured out how to take enough pills yet?" … and then you're talking to crews after, and the banter back and forth is like, "Really, like with Google, couldn't you have figured out how to do it properly?" … then imagine if you were a paramedic in that room who has suicidal thoughts, you're really not going to open up to anything about that because we're making fun of people who can't complete suicide. (Paramedic 5)

Dark humour is commonly used as a coping mechanism for dealing with stress but can reinforce stigma. In addition, participants reported negative judgment of members within the paramedic service who seek mental health care, including those who take psychiatric medication for anxiety or depression. Similarly, in police workplaces, exposure to those with mental illness reinforces stigma in that they do not want to be identified as like the people they interact with when responding to calls: "There is such a negative social stigma, exponentially so with police because that's all we deal with … 'Don't get too close, you'll catch crazy.' It's seen as a negative" (Police 5). Across all three sectors, it appears that responding to calls involving individuals with mental health disorders, particularly those that are repeatedly for the same individual, may have a significant impact on first responder attitudes and stigma towards psychological difficulties.

Police reported fear of, as well as experience with receiving, unsupportive comments from management. They also reported concerns that their career progression would be blocked if they had a history of mental health problems or if they sought mental health treatment: "Somebody may see an application that's pretty good …

'Isn't he the guy that, you know, snapped?' ... they just hear 'mental health injury,' so they're nuts. It's still very simple. Officers are very aware, but internally it's still like, 'Oh God, we might have to deal with that.' … They won't be trusted because they have mental health problems" (Police 1).

There are also legal confidentiality barriers for police to discuss traumatic events they have witnessed. One participant described the inability to discuss a potentially psychologically traumatic event as a barrier to care if a member is under investigation by the Special Investigations Unit. This participant reported that officers could not engage with people not involved in the event until after the Special Investigations Unit interview under the *Police Services Act*. According to this participant, members can be charged if they do not follow the *Act*.

Firefighters, paramedics, and police officers described struggling with mental health challenges as isolating due to not knowing how to talk to others about their mental health issues or symptoms. This resulted in feeling isolated, alone, and socially withdrawn. Participants' concerns that their mental health challenges would signal weakness to their colleagues and management served as a barrier to care. Police reported not wanting to show any weakness or vulnerability at work. Paramedics expressed concerns about appearing weak for reporting mental health problems after an incident when their partner was not affected by the same event:

> There's also the stigma of seeing me and my partner go to a call that's traumatic, and the one person is completely fine, the other person is not … if I go off work because this really bothered me, but that person doesn't, like do people think I'm weak? … Do people think there's something wrong with me? … if one partner's fine, the other isn't, there's that stigma as well … that comes from peers, it comes from management, it comes from all levels. (Paramedic 4)

Gender was reported as a barrier to seeking mental health services by female participants across all sectors. Female participants reported gender-specific social barriers and perceived a need to appear "tough" or risk being discounted or taken advantage of.

Social/professional role and identity

Both firefighters and paramedics reported their perspectives regarding the duty to serve irrespective of current well-being. Participants reported that the duty to work came first, and any consequences were secondary.

Participants emphasized that the intertwined personal and professional identities must be accounted for when operationalizing mental health care for first responders. "We're the ones who go in and fix things … for policing, it's a calling, and it's a career. It's not just a job, and it becomes part of your personality and becomes part of you" (Police 6). Participants also reported concerns about being stigmatized if they were seen accessing mental health care and expressed feelings of vulnerability when discussing having sought mental health care.

Emotion

All services reported emotional (e.g. anger, irritability), behavioural (e.g. increased substance use, decreased social interactions), and physical (e.g. poor sleep, impaired daytime functioning, decreased energy, nausea) impacts of cumulative stress from repeated exposure to trauma:

> It affected my ability to treat patients properly. It's affected my ability to be professional. It's affected my ability to show up for work consistently. It has significantly affected me in every single facet. Physically, being a paramedic is a very physical job.… Being affected mentally … it affects sleep, it affects strength, affects the ability to exercise, and take care of myself … (Paramedic 3)

Beliefs about consequences

All sectors indicated that involving spouses or families at the right time in mental health treatment can have beneficial outcomes. Participants highlighted the value of having their spouses or family understand the requirements of a first responder vocation and being educated about the signs, symptoms, and potential solutions for mental health challenges.

Discussion

Among first responders, the most commonly reported barriers to overcome when accessing mental health care included fears around confidentiality, lack of trust, lack of cultural competency in services, a lack of clarity about what services were available, how to access those services, and stigma within first responder organizations.

Concerns about potential disclosures causing stigmatization have previously been cited as the most frequent barrier to care.[45] The emphasis on stigma is consistent with past literature on barriers to care and mental health stigma and its impacts on help seeking and accessing care.[12,18,21,22,45] The interviews suggest that stigma includes individuals' thoughts, feelings, and behaviours about mental health, and workplace policies and actions. The study's results also offer important insights that may be especially salient in informing concerted efforts to launch tailored interventions and services specific to this population to better protect and sustain their mental health and well-being over the short- and long-term.

The advantage of using a systematic approach based on the TDF is that it addresses a specific behaviour in a specific context (in this case, attending a First Responder OSI Clinic). Based on the results of this study, we have nine recommendations for encouraging attendance at such a clinic (Table 3).

The stigma around mental health must be addressed in first responder organizations. How this should be accomplished remains unclear; however, it is unlikely that just telling first responders about the signs and symptoms of mental illness is enough. This study suggests that educational content that also includes information about the long-term outcomes of mental illness may be helpful. The results serve as a useful resource for first responder organizations to inform service development and delivery of internal and external services. Information on treatment preferences and current treatment options could be utilized to address poor or ineffective treatment uptake and access to care. Areas for future research could include additional mental health training to increase knowledge, decrease cynicism among first responders, and confront unaddressed or lingering organizational-level stigma in first responder organizations, in addition to further research on a larger scale about how first responders wish to obtain mental health care.

TABLE 3
Recommendations to support first responders to access mental health care in study on factors to encourage help-seeking and accessing mental health care, Ottawa, Canada, 2019

1.	**Confidentiality**	Be transparent about confidentiality and the limits of confidentiality when seeing first responders and other PSP, whether face-to-face or virtually.
2.	**Establishing policies and communication of key information**	Establish written policies and information (e.g. posting FAQs online) on confidentiality, including security provisions for online platforms, where any notes are kept and their security, who can access these notes, and when confidentiality may be broken (e.g. if there is a concern related to harm to self or others).
3.	**Adoption of tailored approaches to physical space design or layout of services**	Since participants had significant concerns about sitting in a waiting room with other clients, any mental health services specific to first responders and other PSP should adopt a tailored approach towards offering face-to-face meetings, discussions with potential clients regarding clinic design (i.e. physical layout and waiting room), and whether a uniform-free environment is appropriate. Potential additional suggestions for the physical space design or layout of services for maximum privacy and confidentiality include assessing whether sessions can be heard through vents or doors while clients are sitting outside a therapist's office and adopting the "two-door" approach. One door is designated as the entry point to enter an office, and the other is the exit point.
4.	**Clinic environment**	Clinic administrative staff should be dedicated to sustaining a confidential and culturally competent environment.
5.	**Sector-specific training to develop cultural competency**	Clinicians and administrative staff should receive didactic and experiential training regarding cultures and workplaces of first responders and other PSP to develop awareness, sensitivity, and the necessary skillset to work with this population.[46] The most effective methods to accomplish these recommendations remain unclear. Some suggestions include ride-alongs; however, these can be time-consuming and require buy-in from the service or workplace. Clinic policies should also outline opportunities for additional training and supervision to support continued development of cultural competency.
6.	**Communication about accessing services**	Specific policies should be established with different first responder and other PSP organizations. All PSP need to know how to access any clinics dedicated to first responders and other PSP, and to have clear information about what the clinic does and does not do disseminated through a dedicated website for that clinic.
7.	**Sick leave policies, entitlements, and navigating insurance bodies**	First responder and other PSP organizations, as well as employee insurance bodies, need clear and accessible information regarding sick leave policies, entitlements, and how to navigate insurance bodies for mental health–related claims. This information should include detailed implications of doing so (e.g. impact on salary, pensions).
8.	**Inclusion of families**	Involving families as part of any routine assessment should be standard practice.
9.	**Supports for navigating transitionary periods**	Clinics dedicated to first responders and other PSP should also design interventions to address role changes and transitions in identity during retirement and other transitionary periods.

Strengths and limitations

The results underscore the pervasive and troubling nature of several barriers, particularly concerning the widespread and deeply entrenched nature of stigma in organizational settings. The results serve as a valuable resource for future research and organizations to inform service development and delivery of internal and external services.

Our study has several limitations, which we list here to help guide future research. The semistructured interviews provided an opportunity to gain in-depth and thorough responses from participants but these results reflect members' perspectives within the tri-services in Ottawa, Canada, and may not be generalizable to broader first responder populations. Replicating the study in other cities will inform mental health service delivery and identify organization-specific barriers to care. Additionally, given the small sample size and recruitment methods from tight-knit first responder services, protecting privacy and confidentiality were paramount. As such, we omitted collecting certain demographic characteristics (e.g. race and ethnicity). A larger study would support assessing demographic dimensions investigating intersectional impacts of other determinants of health on barriers to accessing care in this population.

Conclusion

To the best of our knowledge, this is the first theoretically driven, structured qualitative study using an implementation science determinant framework to systematically examine barriers and facilitators facing first responders and other public safety personnel trying to access mental health services, specifically those tailored to their needs. Our results inform several recommendations for encouraging accessing mental health care, and provide a possible explanation of why, despite a high rate of mental health disorders in this population, some first responders do not access care. Establishing procedures that protect the confidentiality of first responders and ensure the cultural competency of the clinic staff are potential targets. Other possible interventions include informing organizations about what is available, how to navigate and access mental health care, and the consequences of accessing care. Lastly, there is a need to test suggested interventions to target individual-level behaviour within complex systems, such as changing organizational policies that may reinforce stigma and act as barriers to seeking mental health care.

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Conflicts of interest

The authors declare that they have no conflicts of interest to report with respect to the research, authorship, and publication of this article.

Authors' contributions and statement

VT (Co-Principal Investigator), SH (Co-Principal Investigator), JJ, RNC, IC, AH, SL, DF, MJH, KT, DC—conceptualization, methodology. VT, AB (Research Assistant)—data collection. AB, VT, PB, ZC (Research Assistant), JM—formal analysis. VT—writing—original draft. All authors—writing—review and editing.

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