ORIGINAL RESEARCH



The responsibility to care: lessons learned from emergency department workers' perspectives during the first wave of the COVID-19 pandemic in Canada

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Abstract

Background This study's objective was to examine emergency department (ED) workers' perspectives during the Canadian COVID-19 first wave.

Methods This qualitative study included workers from nine Canadian EDs who participated in 3 monthly video focus groups between April and July 2020 to explore (1) personal/professional experiences, (2) patient care and ED work, (3) relationships with teams, institutions and governing bodies. Framework analysis informed data collection and analysis.

Results Thirty-six focus groups and 15 interviews were conducted with 53 participants (including 24 physicians, 16 nurses). Median age was 37.5 years, 51% were female, 79% had more than 5 years' experience. Three main themes emerged. (1) Early in this pandemic, participants felt a responsibility to provide care to patients and solidarity toward their ED colleagues and team, while balancing many risks with their personal protection. (2) ED teams wanted to be engaged in decision-making, based on the best available scientific knowledge. Institutional decisions and clinical guidelines needed to be adapted to the specificity of each ED environment. (3) Working during the pandemic created new sources of moral distress and fatigue, including difficult clinical practices, distance with patients and families, frequent changes in information and added sources of fatigue. Although participants quickly adapted to a "new normal", they were concerned about long-term burnout. Participants who experienced high numbers of patient deaths felt especially unprepared.

Interpretation ED workers believe they have a responsibility to provide care through a pandemic. Trust in leadership is supported by managers who are present and responsive, transparent in their communication, and involve ED staff in the development and practice of policies and procedures. Such practices will help protect from burnout and ensure the workforce's long-term sustainability.

Keywords COVID-19 · Burnout · Wellness · Responsibility to care · Emergency department team · Solidarity

Résumé

Contexte Cette étude avait pour objectif d'examiner le point de vue des travailleurs des services d'urgence pendant la première vague de la COVID-19 au Canada.

This work was presented at the Canadian Bioethics Society Annual Conference (April 30th, 2021; virtual conference) and the Canadian Association of Emergency Physicians Annual Conference (June 15th, 2021; Winnipeg, Canada, virtual conference).

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Méthodes Cette étude qualitative a inclus des travailleurs de neuf services d'urgence canadiens qui ont participé à 3 groupes de discussion monsuels par visioconférence entre avril et juillet 2020, pour explorer: (1) leurs expériences personnelles/ professionnelles, (2) les soins aux patients et le travail au service d'urgence, (3) leurs relations avec les équipes, les institutions et instances dirigeantes. Le "framework analysis" a guidé le receuil et l'analyse des données.

Résultats Trente-six groupes de discussion et 15 entretiens individuels ont été menés avec 53 participants (dont 24 médecins et 16 infirmières). L'âge médian était de 37,5 ans, 51% étaient des femmes, 79% avaient plus de 5 ans d'expérience. Trois thèmes principaux sont ressortis. (1) Au début de cette pandémie, les participants se sont sentis responsables de prodiguer des soins aux patients et solidaires envers leurs collègues et leurs équipes des urgences, tout en cherchant à équilibrer la gestion de nombreux risques et leur protection personnelle. (2) Les équipes des services d'urgence souhaitaient participer aux prises de décision, informées par les meilleures connaissances scientifiques disponibles. Les décisions institutionnelles et les lignes directrices cliniques doivent être adaptées à la spécificité de chaque salle d'urgence. (3) Travailler pendant la pandémie a créé de nouvelles sources de détresse morale et de fatigue, notamment des pratiques cliniques difficiles, la distance avec les patients et les familles, les changements fréquents d'information. Bien que les participants se soient rapidement adaptés à une « nouvelle normalité», ils étaient préoccupés par l'épuisement professionnel des travailleurs au long terme. Les participants qui ont vécu un nombre élevé de décès de patients à l'urgence se sentaient particulièrement mal préparés. Interprétation Les travailleurs des services d'urgence estiment qu'ils ont la responsabilité de fournir des soins en cas de pandémie. Un sentiment de confiance dans les décideurs peut être soutenu par des gestionnaires qui sont présents et réactifs, transparents dans leur communication, et qui impliquent le personnel des services d'urgence dans le développement des politiques et procédures cliniques. De telles pratiques aideront à protéger contre l'épuisement professionnel pour garantir le bien-être des travailleurs d'urgence.

Clinician's capsule

What is known about the topic?

Emergency department (ED) workers are on the front lines during pandemics, facing important stressors and changes to their work.

What did this study ask?

What were ED workers' perspectives during the first wave of the COVID-19 pandemic in Canada?

What did this study find?

ED workers believe they have a responsibility to care for patients through a pandemic, in solidarity with their ED colleagues.

Why does this study matter to clinicians?

Leadership should encourage ED workers' commitments by involving the ED team in decision-making and protecting them from burnout.

Introduction

Coronavirus disease 2019 (COVID-19) has affected millions in Canada [1], leading to transformative changes in emergency departments (EDs). ED workers have had to minimize physical contacts with potentially contagious patients [2–4]. They have faced complex issues conceptualized in three interrelated categories: (1) the balance between the duty to care and personal safety; (2) modified interactions with patients and families; (3) relationships with their colleagues,

work environment and leadership [5, 6]. COVID-19-related research has focused on ED physicians' and nurses' mental health or burnout [7–12]. ED physicians report a strong moral obligation to care for patients, while dealing with their own fears of contracting COVID-19 [13]. Understanding ED workers' concerns and perspectives is fundamental to design supportive, responsive emergency preparedness policies during this ongoing pandemic. The objective of this study was to prospectively examine Canadian ED workers' perspectives during the first wave of COVID-19.

Methods

Setting

This was a qualitative study of ED workers in 9 urban Canadian EDs between April 9th and July 29th, 2020. This study was designed before it was known how patient populations or regions would be affected. A convenience sample of EDs sought to include even numbers of pediatric and general EDs from the Pediatric Emergency Research Canada network and from a group of EDs in Quebec (N=4 general; 5 pediatric), with Eastern and Western Canada sites (N=6 Québec; 2 Alberta; 1 British Columbia) [14].

Participants

Diversity in workers' roles was sought through purposeful sampling to obtain a rich representation of ED work and team dynamics [14]. Direct contact and open invitations to all ED workers identified interested participants. Participants were chosen based on interest and availability until 5-8 ED





workers were enrolled. We sought to recruit 2-4 of each physicians, nurses, other workers (respiratory therapists, social workers, administrative support, cleaning staff, patient attendants, child life specialists) [15]. Research assistants at each site explained the study and provided written consent forms. Verbal consent was recorded. Participants were asked to keep discussions confidential. Ethics approval was obtained at all participating sites.

Study design and data collection

Focus groups were preferred over individual interviews based on the importance of ED teamwork [16]. Each participant was invited to 3 monthly 60-min (English/French) focus groups, using a secured videoconference application. Sites that began data collection after May 15th, 2020 conducted two focus groups. Individual interviews were offered to participants preferring this method or unable to join focus groups.

Our approach was based on the tradition of qualitative inquiry in natural contexts [17, 18]. Our purpose was to report descriptions and interpretations of information shared by participants, and then to move the analytical focus from particular comments towards a conceptual perspective [19, 20]. Framework analysis guided the study design; data collection and analysis followed the process of familiarization, identification of a thematic framework, indexing, charting, mapping and interpretation [21].

Study investigators designed the semi-structured interview guide to investigate the study's 3 main themes: (1) personal and professional experiences; (2) patient care and ED work; (3) interactions with peers, institutions, public health authorities, and government (Appendix 1). The guide was reviewed by the research team, available in French and English and piloted without changes.

Focus groups were conducted by researchers with either personal experiences of the study phenomenon or more objective perspectives [22]. Predetermined themes and subthemes were explored during each interview. Weekly team meetings allowed for subthemes to be echoed back and specific items to be added. Novel subthemes were explored at different ED sites, geographical areas, types of EDs, and time points. Consensus was not sought during interviews. To encourage participation and to avoid potential power differentials, physician participants were usually interviewed with physician or nursing peers. The standards for reporting qualitative research guidelines were used [23].

Data analysis

Focus groups were recorded and audio files transcribed verbatim. A thematic framework was developed based on the interview guide themes [21]. Then, a descriptive strategy was used to structure data and emerging subthemes into the coding tree as they were identified by interviewers and coders during team meetings. Data was coded using NVivo v.12 (QSR International Pty Ltd.). Reliability and stability of the coding process was assessed regularly by intercoder testing; corrections to code definition and coding tree structures were made to resolve discrepancies during team meetings. Progressively, a thematic framework of non-mutually exclusive codes was developed. Finally, key themes and subthemes were mapped, triangulated and interpreted to define concepts, generate meaning and provide a final conceptual framework [21]. Quotes were translated from French to English by two bilingual researchers.

Triangulation

To obtain a comprehensive understanding of the research phenomenon and to enhance trustworthiness of findings, data triangulation was sought by including workers with different roles and diverse study sites (geographically distinct, varied expertise) [24, 25]. Data was triangulated and contrasts were examined specifically between general/pediatric sites, Eastern/Western sites, and professional groups.

Results

During the 16-week study period, 53 ED workers participated in 36 focus groups and 15 interviews; 25 participants (47%) worked in an general ED (Table 1). Six workers participated exclusively in individual interviews (Appendix 2). Focus groups included the same participants, except 1 participant who participated in 1 focus group followed by 2 interviews, and 4 additional interviews with participants unavailable for focus groups.

Theme 1: Personal responsibility (Table 2)

The responsibility to care for patients

Participants felt it was their responsibility as highly trained, specialised, and experienced workers to continue to provide emergency care to patients throughout the pandemic. This was instinctive, building on a previously established professional identity and responsibility as an ED worker. Participants reported they had the requisite knowledge, experience, and attributes to sustain the pressure of working during a pandemic (e.g., efficiency, adaptability, creativity, resilience, ability to manage chaos). Working during the pandemic provided participants with a sense of purpose. Participants never referred to external obligations as incentives to work.





Table 1 Participant demographic characteristics (n=53)

Characteristic	N (%)
Role in the ED	
Physician	24 (45%)
Emergency Physician	14 (26%)
Pediatric Emergency Physician	10 (19%)
Nurse	16 (30%)
Other	13 (25%)
Unit clerk	5 (9%)
Patient care attendant (PCA)	3 (6%)
Respiratory therapist	2 (4%)
Housekeeping	1 (2%)
Social worker	1 (2%)
Child life specialist	1 (2%)
Median age, in years (range)	37.5 (24–62)
Gender	
Female	27 (51%)
Male	16 (30%)
Prefer not to answer	10 (19%)
COVID-19 comorbidity risk factor	7 (13%)
Number of years working in the study site ED	
1–2 years	6 (11%)
3–5 years	5 (9%)
6–10 years	17 (32%)
More than 10 years	18 (34%)
Number of years working in healthcare	
1–2 years	1 (2%)
3–5 years	3 (5%)
6–10 years	13 (24%)
More than 10 years	29 (55%)
Experience with a previous pandemic	25 (47%)
Participant lives with at least 1 other adult	40 (75%)
Participant lives with at least 1 minor	19 (36%)

Balancing risks and protection

The ED was considered a high-risk environment to contract COVID-19. Participants reported concerns for their own physical health. Potentially infecting their families and contacts was a new additional worry. Appropriate protection measures were the fundamental prerequisite to being able to work. Participants described uncertainty regarding personal protective equipment (PPE) availability, type of PPE required, and how to ensure safety in the ED. Initially, these were sources of concern and vulnerability, but participants eventually reported feeling safe, following the implementation of adequate measures. Protecting the ED team was paramount as workers believed their expertise was hard to replace.

A responsibility to the ED team

ED teamwork, a core value of ED functioning, was amplified during the pandemic through common goals (protect each other, provide optimal patient care), improved interdisciplinarity (shared tasks to minimize patient contact), and solidarity. Although the pandemic could be an added source of conflicts within the ED, participants found support in their ED team and they trusted them to ensure their safety. ED managers were considered trustworthy members of the team if they were physically present and responsive.

Theme 2: ED team engagement in guideline development (Table 3)

Engaged ED teams

Participants believed ED teams had the expertise to rapidly design guidelines that could best ensure their safety and the provision of quality patient care, all the while recognizing that they could not operate without the involvement of other clinical teams and management levels, who possessed essential knowledge to inform decisions (PPE availability, infection control and prevention).

The importance of decisions based on the best available scientific knowledge

Although managing uncertainty was considered common in emergency care, participants found dealing with the unknowns of COVID-19 challenging. Participants acknowledged that developing clinical guidelines was fraught with complexity given the uncertainty and urgency. Professionals especially trusted decisions based on science, believing public health should stay impartial.

Management and communication

Frequently changing directives and conflicting guidelines revealed the lack of available knowledge to inform decisions. With this paucity of information, participants wondered how PPE protocols were designed, speculating that choices might be based on availability instead of offering the best possible protection, generating institutional conflicts. Initiatives that streamlined information towards clearly identified sources within EDs allowed for better information management and were appreciated, as was responsive communication and empathetic ED leadership. "Top-down" clinical guidelines—believed necessary for the implementation of prompt institution-wide procedures—had to be adjusted as they were not grounded in the reality of ED work, causing frustration.



Table 2 Quotes for theme 1 and subthemes: personal responsibility

The responsibility to care for patients **Professional identity:** "I love my work. I love what I do. It's selfless every day, but it's been like that for years, and it will continue to be like that." (Nurse) "I do it because it's my responsibility, and when vou're a physician, that's your responsibility, no matter what happens. So, I don't feel very different given that there's a pandemic, because it's never been a question that I stay home and be afraid to go to work." (Physician)

> Working during the pandemic as expansion of ED work: "People are going to have to understand that hygiene and housekeeping is very important. We are there for prevention. We are there to eliminate. We are microorganism hunters. We fight them 100%. It's not only COVID. It's gastro, it's tuberculosis. We knew how to get rid of this thing, to prevent people from getting contaminated." (Housekeeping)

> ED workers' attributes: "I think we're in a very, very adaptable field of medicine. It's our bread and butter to adapt to situations. It's something we are all proud of, And to be prepared, to prepare for everything." (Physician) "You know, that's the emergency room. You have to live with a certain amount of stress. If you can't deal with it, you don't work in the emergency room, you work somewhere else."

> Sense of purpose: "I was excited. It's a little weird to say, but I thought to myself: we're trained as emergency nurses. And I feel like I wouldn't have wanted to miss this. I wouldn't have wanted to be on vacation or confined at home. Here, I get the impression that Γ m useful. Γ m doing more than watching Netflix or gardening, so I feel useful in this crisis." (Nurse)

High-risk environment: "The virus is there, next to me, and I get uncomfortable. It scares me." (Unit clerk)

Risk of contracting a COVID-19 infection: "I am happy, I've had a beautiful life, I have a beautiful life, so if I die, well I'll have done really everything I wanted. (...) I try to do the maximum, for the patients, and for everyone around... So if it's my turn, well it will be my turn, but I'd rather live longer." (Physician)

Protection as pre-requisite to provision of care: "Protection is paramount, and it's your health before the patient's, unfortunately, because if you have an expertise in emergency, that expertise is very important, and it is precious, because you're not replaceable, or not very replaceable. So, you have to protect yourself and think about your health and not contaminate yourself." (Nurse)

Part of the team: "For me, it's a win. It's a win to be with people, to be with professionals, to make decisions, to work in the same direction, to get results, sometimes that are positive, sometimes that are negative, but that's part of the day-to-day. I anticipate coming to work, but in the end, I will go to work anyway because they need me. Yes, we are replaceable, but I feel the need to be there, to help, to support, because it isn't easy for anyone." (PCA)

Teamwork as core value amplified by the pandemic: "I think there's nothing like group solidarity to create something coherent and trustworthy." (Physician)

Trust in the ED team: "In the emergency department, we react the best that we can with what we have. So, we trust them more. Because we know that our doctors, our team, they care about our health and safety." (Nurse)

Potential for conflicts: "It was rocky. They were some more difficult times, some easier times. But yearround, it's hard sometimes too, we have our conflicts. Since the beginning of COVID, there have been more difficult moments. There are people who questioned their careers." (Physician)

Balancing risks /protection

Responsibility to the team

Theme 3: Sources of moral distress and fatigue (Table 4)

New distressing clinical practices

Participants struggled with numerous changes in practices and new barriers. Revised resuscitation guidelines required that ED workers don PPE before providing patient care, encouraging definitive airway management to prevent aerosolization. These changes represented some of the most difficult scenarios for ED workers who felt patient care might be delayed. ED workers struggled with the balance between their responsibility to care for patients, and their need to protect themselves and their colleagues. Quebec adult EDs saw their practice change significantly with regards to endof-life care as they were confronted by patient deaths, daily, which many felt unprepared for.

Challenging distance with patients and families

During the first weeks of the pandemic, ED workers spent less time in patients' rooms, minimizing physical contact out of fear and PPE rationing, while feeling that PPE hindered communication and patient care. Family visiting restrictions added to workers' concerns as patients were often alone,





Table 3 Quotes for theme 2 and subthemes: ED team engagement in guideline development

Engaged ED teams

ED team decision-making abilities: "I think that the day we decided to make our own decisions, applied to our [ED], for our people, it was good for team spirit - and I'm not just talking about us, with the nurses, I'm talking about all the ED staff. And those were probably the best decisions in the context of the information that we had." (Physician)

Each team has their role: "There's no certainty that the decisions will always be perfect, but you have to accept that it can't always be perfect, and that some people can make mistakes. And our infection prevention and control team, they made a lot, a lot of adjustments, and some smaller things didn't go as well. But if you look at the big picture, I think we have serious people who are trying to make the best decisions possible, and that's what's most important. Those people work very, very hard and I admire them. So, I trust these people who give us recommendations." (Physician)

Decisions

Decisions based on the best scientific knowledge: "I trust my colleagues in public health, and I trust that they will make all the best decisions, at the moment that they are making them, and these are not easy decisions because these are exceptional situations. I just don't know whether their messages and decisions will be entirely communicated to the government who, after that, gives us the message. And I feel like the border's become blurrier and blurrier in the last few weeks." (Physician)

Management strategies Transparency: "But what is sad, is the lack of transparency. When I do something, I can explain to you why I'm doing what I'm doing and that's OK. But here, they'd come and "the procedural mask is OK for everyone" and the next day "no, no, it will be the N-95." But why was the procedural mask OK yesterday and now it's the N-95? (...) I still don't have answers to those questions. And when you ask higher up, the only thing they say is "Pouah!" and they ignore you. I'm sorry, but, in life, when you ask me to do something, there's a reason behind it. I am not a robot; I am a human being." (Nurse)

> **Positive communication strategies:** "There was some kind of information transfer, a sort of "COVID hierarchy", going from our chief, to our leaders, and now it's everyone on the floor who's familiar with the measures. I thought it was magnificent." (Physician)

"I think communication was great. I think, from a managerial level, so our direct managers, I think they've done really, really well being supportive and providing that information as soon as it's available. You know? Just being empathetic, like oh, we realise there's changes all the time, and I think they've been great. And I think most people recognize that that responsiveness and those changes are required." (Social worker)

Advantages/limits of "top-down" decisions: "On the one hand, it has its advantages, it simplifies things when one person upstairs decides everything but, on the other hand, it takes away a lot of the day-to-day adjustments we can do downstairs." (Physician)

"It's been very frustrating because you're usually just waiting for the dust to settle for another email to come out to tell you they're going to change it all again because they didn't think of some glaring obvious thing that someone will see the first time they go to do something." (Nurse)

"There are rules that are applied homogeneously everywhere, in one shot. So, they chose the easiest management method for them, but not necessarily for the employees. It's like: "everyone is full-time starting now." But in the emergency department, we had twelve nurses who weren't doing much and were taking care of one patient, while there were people overworked on the wards. Because it's hard to modulate decisions during a pandemic: it's one complete and total decision for everyone." (Nurse)

even in their end-of-life. ED workers tried to mitigate this problem by innovating and communicating with families through videoconference applications. Once protection protocols had stabilized, many ED professionals increased their physical presence with patients, seeking to provide the best care possible. Many advocated for more family presence.

Ongoing sources of potential burnout

Working in the ED during the first wave was complicated by many new stressors within and outside the ED. Participants reported receiving a "tsunami" of information, including frequently changing clinical guidelines and media updates. Workers continued to provide care while their ED's physical layouts were dramatically modified, including construction of new negative pressure rooms or ED annexes. Participants reported concern for the healthcare workforce's longterm sustainability, given the increased work pace, hours, mental load, new environments and practices. ED workers

struggled to find time and space to recuperate, while managing restricted family activities, and potential loss of income. Rigid managerial strategies imposed on the workforce (decrees increasing work hours or forcing vacation cancellations) were experienced as a lack of recognition and breach of trust. Participants reported a disconnect between their own and laypeople's pandemic experiences, especially as isolation measures lifted.

Evolution over time

Initially, participants reported mixed feelings of fear and willingness to act. Within weeks, they had adapted to numerous changes and a "new normal". Worker fatigue and potential burnout emerged: "At the beginning of a crisis, you're full of energy. And now we've hit a wall. And I think some people are starting to feel tired. You can't sustain that level of energy forever (Physician)."





Table 4 Participants' quotes for theme 3 and subthemes: Sources of moral distress and fatigue

Distressing clinical practices

New guidelines: "Well, the protocols have stabilised. That clearly changes a lot less than it used to. The level of protection is clearer and clearer for all of the staff. That also helps. So, because the protocols aren't changing anymore, that means that everyone knows their protection methods." (Nurse)

Resuscitation: "But as soon as it's an emergency situation, there's a cardiac arrest, everyone gets dressed. We can't just walk into the room directly and start maneuvers anymore. So, of course it's been difficult, as much for nurses as for patient care attendants. I've even had discussions with certain doctors who also feel powerless. (...) We get the impression that we haven't always been able to give our 100% because of the COVID measures." (Nurse)

End of life care: "Palliative care is the complete opposite. What we're seeing now is we're accompanying them in death, so it's a kind of paradigm shift that we're not used to doing in the emergency room. We're very proactive at trying to save lives, and I'm not saying we're not doing that anymore, we're still trying to do that as much as possible too. But when we're at another level, it's more important to accompany, and we're maybe less experts at that. Anyway, I'm not saying it's my expertise." (Nurse)

Difficult decisions: "You know, I'm ready to take the risk, to go in there and do chest compressions. But here, I had the patient care attendant, the nurse, next to me. (...) Everything goes into the algorithm. Does the patient have a chance? Do I put my staff at risk?" (Physician)

Challenging distance with patients & families Less physical presence with patients: "There's nothing like being with the patient to witness the unsaid, attitudes, and all the transcultural aspects too. We know patients from different origins, from different social backgrounds will express themselves, will be different, and that, you have to be with the patient to see that. So walls, intercoms, the this and the that, I find it's harming us. And we probably missed a few things in doing that, I think." (Physician)

> Family visiting restrictions: "Already in the emergency, everything goes fast, and we don't always have the time to be close to our patients. But I realise that, actually, at least I was closer to my patients than now! It wasn't that bad after all. I find there's a break and I find it sad for patients and their families because no, their answer is no, we don't authorise any visits. We don't tolerate any visits. So, the patient is alone, and often anxious." (Nurse)

> Trying to humanise care: "I think in the first weeks, the stress made us less good. I had the impression that, my goodness, it put a lot of distance in the physician-patient relationship, all that "cling-clang" when you came into the room, the gloves, the mask, the visor, the blouses... Now I think I've gotten used to it, and I can laugh about it with patients. I find I've begun to have the same level of relationship with patients as I did before the pandemic. But it took a few days, weeks." (Physician)

Ongoing sources of potential burnout

Structural stressors: "We had renovations. We had construction. We had quick changes in protocols, almost twice a day. (...) But that all happened pretty quickly. In less than one month, they built negative pressure rooms like they've never built before. We had five and now we have fifteen in the emergency room." (Nurse)

Information overload: "We don't stop receiving e-mails. It's non-stop. It comes in, it comes in, it comes in... I've never received this many e-mails in my life." (PCA)

Increased workloads: "I think the ministerial decree affected a lot of people. Full-time for everyone really led to everyone being in worse shape, worse spirits, be it in their lives, or their professional lives, or at home." (Nurse)

"We worked more, and shifts were more tiresome. I spoke to a lot of people on the team who said: "We were glad there were less patients because it was extremely draining, and stressful." (Physician)

Change fatigue: "I've received this last guideline change with lassitude. Because I know that the teams I work with, nurses and all that, they've had an incredible overdose of instructions, and we're asking a lot of them. They've taken away their vacations... And they're asking for a lot, a lot of changes. And I think they won't be able to introduce any more changes." (Physician)





Table 4 (continued)

Pressures of working during the pandemic: "It's difficult, it's exhausting, it's taxing what we do. We are with people. We always give our best. You can't say: "Ah, well, today, I will do it halfway" or "today, I will take more breaks." We can't do that, and we are always constantly drained because everything takes more time, and we think more, we think about protecting ourselves, we think about assembling our things, we think more than usually, and we finish our days... And I too, am much more tired than I usually am." (Nurse)

"Given the emotional energy required to do this job on a regular basis, having downtime is really, really important and given the fact that we're homeschooling, we're maintaining a household, we're supporting our partners, we don't get an opportunity to recharge. I think that is really, really difficult and I think that's something that's been experienced by a lot of our staff as well. And then you have other staff who might not necessarily have younger children but have elderly parents in retirement homes or even just in the community who are far more vulnerable. And so, worrying about them and helping them and supporting them also requires an incredible amount of energy. And so, there's really just no rest, there's no recharging that typically happens and so I think that accumulatively can lead to compassion fatigue, and just at the end you don't have anything left." (Social worker)

Distance with the general population: "There are people for whom life is taking back a slightly more normal course and they're more relaxed because of that. For us, at work, we have a constant reminder that no, it will never be like before." (Physician)

Fatigue and potential burnout: "Right now, we're a little exhausted, fed up. Summer vacations cancelled throughout all this. I don't think we have the motivation or courage to say "OK, we have to plan for the worse, for the fall, for the winter. What measures are we going to put in place?" I get the impression that we're not preparing for the worst, that the second wave will be terrible, because we're so tired and exhausted after what we've just experienced." (Physician)

Lack of recognition from leadership: "I think we're at wits end. At first, we were living this as a team and it was something special. 'We'll give it our all, we'll get through it.' But now, we get the impression we've been through it, but we're still being manipulated like pawns." (Nurse)

Contrasts

Differences emerged regarding end-of-life care as participants from general EDs in Quebec experienced high numbers of patient deaths. Differences were also identified regarding professional background and decisional authority: physicians possessed more autonomy to act while nurses experienced more rigid managerial decisions (Appendix 3). No other differences were observed in comparing regions, ED types or worker identities.

Interpretation of findings

In this study, ED workers' dispositions to work during the COVID-19 pandemic were personal, driven by a deep engagement towards patient care and ED colleagues. Professional duty to care was experienced as a personal responsibility for ED workers, independently of external, legal or deontological obligations [26]. Participants reported both moral distress and change fatigue. Ensuring ED workers are consulted and involved in clinical practice changes may improve the adaptation of universal guidelines to specific EDs. Clear communications strategies facilitated the transfer

and management of important and often changing information. Given workers' personal commitments to patient care and their colleagues, procedures casting doubt on the availability of PPE or forcing increased work hours, were experienced as a lack of reciprocity.

Comparison to previous studies

Workers interviewed demonstrated commitment to patient care and solidarity with their colleagues. However, they anticipated that future waves would be harder to withstand, as they experienced ongoing stressors (change fatigue, stress, exhaustion, and burnout due to rapid continuous change in the workplace). Research has demonstrated various effects of this pandemic on ED worker mental health [7–12, 27]. ED workers identified ongoing sources of moral distress—when a clinician, aware of the right action to take feels constrained from taking it—including altered patient care, restrictive family visiting policies, and institutional decisions that were not adapted to the ED [28, 29]. Resources exist to assist ED workers in fostering resilience, but these alone are insufficient to sustain them through protracted crises [30]. COVID-19 pandemic policies and education programs have focused



on PPE use and patient care guidelines [31–33]. Our study suggests that ED workers may also benefit from training on navigating other underrepresented aspects of working during a pandemic, like its moral complexity and emotional load.

There are, however, resources exist to support leadership in being responsive to their workforce's experiences [34]. Incident command systems can include workforce wellbeing in their institutional pandemic response plans, throughout the response. Clear communication within EDs facilitate the transfer of timely accurate information [32, 35]. Ensuring ED workers are involved in clinical practice changes may improve the adaptation of universal guidelines. Finally, workers expressed that procedures casting doubt on availability of PPE, increased work hours, cancelled vacations or deployments were experienced as profound breaches of trust and lack of recognition.

Strengths and limitations

This study was conducted in large urban Canadian EDs, potentially limiting the results' applicability to other settings. The study was designed before it was known how patient populations would be affected and included a slight majority of pediatric sites. Subgroup comparisons found major differences regarding end-of-life care in general EDs but mainly similarities across other themes explored in this study. A majority of participants were physicians and nurses, and this study likely does not capture the realities of all ED workers, although participants' answers were similar in subgroup analyses. Several researchers conducted data collection, which could limit coherence. Close team communication, reflexivity and the repeated availability of participants ensured data reliability [22, 36, 37]. Participation in focus groups was excellent, likely due to pre-existing group cohesiveness [15]. All participants remained in the workforce throughout the study period, likely representing a subgroup of engaged workers. Their perspectives are important to foster worker engagement and long-term commitment but may not represent those who left the workforce early in the pandemic and may have experienced greater fear or distress.

Clinical implications

Reciprocal policies that proactively take care of ED workers' wellbeing are important. Involving teams in pandemic ED guideline development should help prevent pressures caused by change fatigue and moral distress. Workers should be given time and guided opportunity to reflect on the moral and emotional issues.

Research implications

Ongoing examination of the long-term physical, psychological and moral effects of working through a protracted pandemic are necessary. Leadership initiatives that have contributed to positive work environments and helped retain ED workers should be shared. Future studies should seek to understand the perspectives of those who left the ED workforce.

Conclusion

ED workers believe they have a responsibility to provide care through a pandemic, driven by engagement towards their patients and colleagues. Leadership can be supportive by being present and responsive, transparent in communication, and by involving ED staff in the development of policies adapted to specific EDs. These practices will likely help protect from burnout, ensuring the workforce's long-term sustainability.

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Author contributions NG conceived of the study, planned and oversaw data collection, planned and oversaw data analysis, conducted the final data analysis and conceptual analysis, and drafted the manuscript. BL conceived of the study, conducted data collection and analysis, corrected and approved the final manuscript. AJC, MR, PC performed data collection and analysis, corrected and approved the final manuscript. CJB, VB were responsible for data management, coding and data analysis; they corrected and approved the final manuscript. VC, EFP, BB, PD, SB, SA, RDG, GT, ML, EDT helped conceive of the study, were responsible for conducting data collection at different sites, provided feedback on the final analysis, corrected and approved the final manuscript.

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Declarations

Conflict of interest The authors have no conflicts of interest to declare.





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