

LEARNING THAT TAKES YOU BEYOND

Gender Based Violence Amongst First Responders: A Scoping Review

June 17, 2023

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This work is co-funded by the Social Sciences and Humanities Research Council and Women and Gender Equality Canada. Ce travail est cofinancé par le Conseil de recherches en sciences humaines et Femmes et Égalité des genres Canada.

The Justice Institute of British Columbia respectfully acknowledges the Traditional, unceded and Treaty Territories of First Peoples its campuses are situated.

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Executive Summary

Background: The issue underpinning this review is the lack of women joining and advancing in first responder organizations. Police, fire, and paramedicine are underrepresented in diversity, including women in the ranks and in leadership roles. In comparison, other professions and work sectors are much closer to parity. Recent public reports emerging from first responder and military organizations reveal significant gendered issues and violence in these organizations that remain discriminatory and unsafe for women to work. These arenas remain male-dominated, historically, and there are still few first responder organizations where women are visible in leadership and public facing roles. This causes curiosity and concern when considered within the current context of public complaints, reports and initiatives all wrapped around the issue of diversity, equality, and inclusiveness. Further, there are many years since new legislation has been introduced at the federal and provincial level that intends to provide safe, equitable and inclusive access based on merit to education and work settings.

Objectives: This scoping review was designed to gather the available evidence to describe and synthesize the dimensions of gendered violence in relation to first responder education and workplace settings. We included education as first responders spend significant practice education and work integrated learning time with those already in practice while completing their education and training. First responders require completion of postsecondary education at the certification and diploma level to join the ranks of police, fire, and paramedicine work settings. It is unknown how first responders experience their education practice and work and what are the dimensions of gender or violence that is baked into the spaces in which they learn and then work. The purpose of this review was to scope the literature to find possible themes, to understand further what we can about structural and organizational aspects and individual aspects of violence perpetrated because of gender in the first responder environments. To define gender violence amongst fire, paramedic, and police services the following questions guided the review: What is known about gender-based violence amongst first responders, and what are the effects of this violence on the first responder communities? What has been implemented to mitigate gender violence amongst first responders.

Results: This review has revealed the gaps in the literature and provides some baseline knowledge of the aspects gender and violence across first responder education, training, and work. First responders are exposed to physical and sexual violence in their day-to-day workplace settings, including the outcomes of violence perpetrated on others, and increasingly, violence against paramedics and police comes directly from the patient or client they are attempting to serve. During their education and training, first responders find that bullying, discrimination, sexual harassment, and microaggressions is normalized and the white male archetype hero is highly valued and associated characteristics are privileged. Similar types of bullying and harassment occur amongst first responders where the code of silence is a significant factor for all students and new hires during education, training, and practice. Cruelty is normalized as building necessary toughness for the job during practice education and orientations. Reporting of these events are inconsistent and sparse due to poor access, poor supervisor capacity, and consequences that are borne by the women reporting not the perpetrators. Data collection and tracking is nonexistent and current organizational structures and work processes enable aggressors many opportunities. There are no key performance indicators, benchmarks, or meaningful reporting along these dimensions for the individuals or organizations. Current initiatives are focused on leaving the burden to report with the women who are experiencing or witnessing the gender-based violence and not shifting the burden to the prevention and oversight by the organization.

Advancement once complete education and orientations programs is difficult for women and are designed for a male to succeed where women are disadvantaged. Women are ostracized through the organizations approach to pregnancy and maternity policy and leaves, and, are steered into "soft" roles where its thought their nurturing ways will be most useful, they are not seen as equal in leadership advancement or specialty teams. Finally, workplace conditions of safety and stress are factors in the experience of gendered violence where equipment, and attire supplied is sized and designed for the male norm and utilization, putting women at a significant safety risk and potential performance gap. The stressor of the organizational culture is much worse than the actual work they do which leads to burnout and professional incompetence.

Key Messages: Relevant and timely education for students, recruits, and leadership about GBV must be made available. Reporting must be confidential, accessible, available, and meaningful. Reporting, metrics, and tracking data must be publicly available. Formal Equity, Diversity, and Inclusion (EDI)change management must be included in leadership and organizational strategic planning. Organizational policies need to recognize and reflect the significant implications of GBV on public safety.

Methodology: We followed the Joanna Briggs Institute (JBI) methodology for scoping reviews and the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (Peters et al, 2020; Tricco et al, 2018). All evidence was considered from 2013-2023 and needed to focus on gendered violence specific to first responders inclusive of physical, psychological, socio-economic, sexual, or verbal violence. The search strategy was iterative, initially developed by two independent reviewers with first responder participants input and limited the search to a titles search of PubMed and Google Scholar. The second search strategy was developed with support from an expert librarian and expanded to include title and text in PubMed, ERIC, Google, CANLII and CINAHL databases. Search terms used to describe first responder groups; violence, gender, women, first responder, ambulance, EMS, paramedic, fire firefighters, fire department, police, RCMP, and law enforcement. Time and budget constraints of this study limited the search to be completed during April 2023.

A search of CANLII using initial search terms provided 38 files related to GBV by first responders, however independent reviewers agreed to utilize only the titles as informing of the topic due to time constraints of the project. The final search strategy can be found in Appendix 1. A total of 1082 articles were identified from searching electronic databases and article references after removing duplicates. Two independent reviewers (BJD, AH) completed a title search using search terms. Article selection was based on title, abstract and in a few cases, article review by two reviewers and selected for relevance in relation to the research focus. Articles were then sorted based on title and abstract, 788 of these titles were eliminated, the remaining articles full text was analysed. These articles were excluded for the following reasons: 210 did not directly evaluate gender violence in first responders, 16 did not qualify due to specific geographical region as to not limit results, 12 were specific to military, 4 were specific to nursing or hospital staff, 1 was specific to corrections. The remaining 51 articles met and were analysed our study parameters.

Background

First responders include police, firefighters and paramedics who are trained and work within organizationally paramilitary hierarchical structures. All three sectors are historically and currently male dominated at organizational and professional levels, with very little diversity across leaders and in decision-making roles. The distribution of power in these types of organizations is concentrated at the top, where the reporting and workflow structures amplify social structures and tend to reinforce strong culture (Kelly, 2022). This top-down strict chain of command structure is thought to be the practical and safe approach to the nature of first responder work, where many qualified practitioners come together to perform in high-intensity, high risk events. This structure intends to remove autonomy and power from subordinates and provides rank the power to direct without question both in the practice arena and the organizational processes. This structural insulation of positional power, control, and influence enables women to be doubly vulnerable to misogynistic culture without means to address issues if they arise. This is reflected in findings (Kelly, 2022) where female first responders are aware of long career first responders who resist change and whom long for the "good old days, where the public revered the police, firefighter's road on the tailgate of the truck through town, and women were only being saved, rather than doing the saving" (p.54).

Highly structured hierarchal organizations such as first responder environments with competitive work cultures are likely to enable bullying. This is evidenced in the literature where bully behavior is directly linked to positional power, where subordinates are vulnerable to the power structure, unable to defend or remove themselves when needed (Hutchinson & Jackson, 2015). This may be indicative of the current experience by women such as in the US police more than 60% of women experienced sexual harassment while at work (Government of Canada, 2018). A UK ambulance workforce report indicates the 42.5% of paramedics who identify as female, (Wilson, Prothero & Williams, 2022) experience bullying and sexual harassment by male paramedics. This significant amount of gendered bullying and sexual harassment is attributed to the boy's club mentality that is resistant to change (Manolchev & Lewis, 2021). Similarly, 25% of female paramedics working in Ambulance Victoria say they do not feel safe or valued at work generally, felt more unsafe when working alongside or within male-dominated teams, and experience sexual harassment and related forms of gender discrimination, including pregnancy and parental status discrimination within their workplace (Victorian Equal Opportunity & Human Rights Commission, 2021 & 2022). Currently in Canada, only 36% of paramedics, 22% of police, and less than 5% of firefighters self-identify as female. With this lack of parity within the three disciplines most first responder teams will be mixed, with women most likely navigating their practice education placement, workplace orientations and career mentorship with male colleagues. Yet, these workplace and training spaces traditionally held by men, is where women experience some of the highest rates of violence due to gender (Schafer, Sutter, & Gibbons, 2015) because they have infringed on male power and privilege (Martin & Jurik, 2007; Glick & Fiske, 1996; Griffith, Roberts & Wakeman, 2016). Since 1992 the United Nations (UN) has advocated for equitable treatment of women. In 2015, more than 20 years since Agenda 21, the UN published the 2030 Agenda for Sustainable Development and dedicated one of the 17 Sustainable Development Goals (SDGs) to achieve gender equity. (UN, 2015; UN, Envision 2030).

In the 2022 report on the SDGs, the UN states that the world is not on track to achieve gender equality by 2030. The Government of Canada (GC) has acknowledged that the persistence of gender-based violence (GBV) impedes gender equity and is a human rights violation and in 2017 launched a federal strategy to end GBV. It's Time: Canada's Strategy to Prevent and Address Gender Based Violence is organized around three pillars: preventing GBV, supporting survivors and their families, and promoting responsive legal and justice systems. (GC, 2017) In 2018 the scope of the first pillar, preventing GBV, was broadened to include GBV in the workplace and Statistics Canada conducted a study, Survey on Sexual Misconduct at Work, gathering evidence to inform strategies to reduce the risk of violence experienced at work. (Burczycka, 2021). Although Canadian women, trans and non-binary people have made great advances in economic and social spheres, there are still traditionally masculine and male-dominated careers where GBV is more prevalent. Bullying and harassment, including sexual harassment, have been reported in ambulance services in the UK and internationally. The ambulance profession has been referred to as a 'boys' club' culture that is resistant to change (Manolchev & Lewis, 2021) Women and gender diverse individuals working in these fields experience more inappropriate sexualized behavior, including touching, grabbing, and stalking by peers in the work setting. (Gruber, 1998). While the front line has seen an increase in the addition of women into the ranks, gender parity remains extremely low. It is only over the past few decades that females have increasingly entered male-dominated first responder workplaces such as police, fire, and ambulance with the proportion of females in these occupations varying from 4% to 32% (Walker, 2018).

In 2014 there were 261,000 reported incidents across Canada of sexual assaults against students during their education programs (Women and Gender Equality Canada, 2021) where 47% of the same student population witnessed or experienced discrimination based on gender in the previous year. First responders are responsible for directly mentoring and evaluating the entry to practice education work integrated learning, orientation, and physical standard requirements for students and new employees. These education and recruitment models rely heavily on peer evaluation where bias, power imbalances, stereotypes and gendered violence occur. Training, practice, and workplace orientation occurs in small teams or pairs distant from oversight and supervision. It is in these education and orientation spaces that first responders train and learn to navigate their own understanding of violence, negotiation of relational and positional power (Anand, 2020) which influences how they come to understand their professional identity and how they practice as individuals and as team members. There is currently no available centralized data collection surveillance or reporting systems to indicate the type, location, and circumstance of gender-based violence amongst first responders in practice or during their education.

Organizational norms and culture impact the ability of women to flourish as first responders. Factors that affect female first responders are presented by Frazer et al. (2020). Workplace stress, gender diversity, violence and bullying are amongst some of the contributing factors to negative experience. Workplace bullying and harassment exists in first responder organizations and is not a new phenomenon (Walker, 2018). Female first responders hold deep values and commitment to their work and are devastated when violence by their colleagues occurs to them. Women are well prepared for nature of their work but have no training in how to manage peer violence in education or practice settings. Similar types of bullying and harassment occur amongst first responders where the code of silence is a significant factor for all students and new hires during education, training, and practice. Cruelty is normalized as building necessary toughness for the job during practice education and

orientation. Over decades there has been little change to support first responders. There is a tendency for workplace bullying and harassment to not be addressed and in many cases this behavior is normalized perpetuating GBV in first responders (Walker, 2018). First responders justify GBV by saying "well that's how it's always been, but instead we have decided to accept it this way. Simpson et al., (2017) discusses metacognition for decision making, urging first responders to "think about how they think". If we can change perspective to highlight the problem of GBV in first response through knowledge mobilization, we can begin to finally work towards policy and procedure change that ensures changes at the front line for women first responders.

Objectives

The objective of this scoping review was to explore the dimensions and implications of GBV amongst first responders from entry to practice education to workplace employment. By mapping the available evidence about GBV in relation to organizational culture and structure and workplace integrated learning and orientation to better understand what enables or reifies aspects of GBV from individual to system levels in these professions. To understand GBV amongst first responders is a complex issue as the dimensions of GBV are both individually performed but enabled within social structures and systems. First responder education is closely linked to workplace social structures and the individuals practicing within them through the significant program time dedicated to practice education. This is also the case for workplace orientation and rookie programs where significant time is also spent under the direct guidance of other practitioners, success in both practice education and rookie orientation is almost completely dependent on the evaluation of the first responder practitioner. To define gender violence amongst fire, paramedic, and police services the following broad questions guided the review: What is known about gender-based violence amongst first responders, and what are the effects of this violence on the first responder communities? What has been implemented to mitigate gender violence amongst first responders? These questions remained as the guide throughout the review, with no further guiding questions developed.

This review was designed to find strengths and gaps in the evidence and provide a conceptual or thematic approach to dissemination of the findings. The purpose of this review was to gather and map the evidence to thematically analyze and present the findings in an organized way. This review did not include a review of the quality of the evidence or a mapping of the type of evidence. Rather this review scoped the evidence to develop an understanding of the prevalence and experience of gender-based violence (GBV) including the root causes and risk factors of violence within first responder professions. Synthesis of the available evidence reveals new knowledge about similarities of dimensions and implications of GBV amongst first responders as well as the gaps in what is known about gender, gender equality and violence in the first responder training and practice ecosystem.

Methods

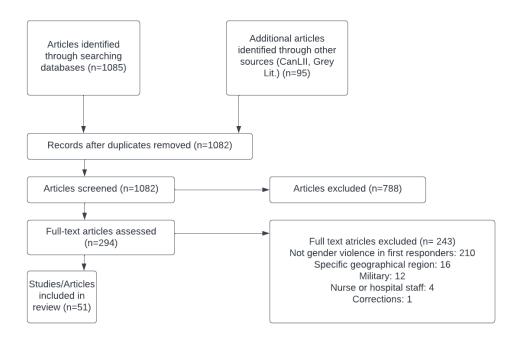
This review followed the Joanna Briggs Institute (JBI) methodology for scoping reviews and the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (Peters, et al, 2022; Tricco, et al, 2018). All evidence was considered including qualitative, quantitative, policy, opinion or commentary articles, and unpublished materials from 2013-2023. Our aim was an

exploratory descriptive analysis of the broad and diverse bodies of evidence related to gender-based violence amongst first responders limited to the entry to practice education and work settings over the last ten years. To be included in our review the information needed to focus on gendered violence specific to first responders inclusive of physical, psychological, socio-economic, sexual, or verbal violence. Papers discussing violence amongst colleagues and violence directed from the client/patient were included.

The search strategy was developed by two independent reviewers and first responder participants were invited to provide search terms or titles to help relate the search to GBV amongst first responders. Further, existing knowledge user networks were contacted to advise on search terms and existing unpublished work. The support of an expert librarian was implemented after the initial search terms and search were completed. We received ethics approval by Research Ethics Board #JIBCER 2023-01-GBVFR for the period April 4, 2023 – April 4, 2024, to enable first responder participant input to developing search terms, strategies and to inform our knowledge mobilization strategies. The first search included search terms and limited the search to a titles search of PubMed and Google Scholar, with the second search based on participant, librarian and researcher search term input and expanded to include title and text in PubMed, ERIC, Google, CANLII and CINAHL. Search terms were generated by the research team for all databases and used in conjunction with the following terms to describe first responder groups; violence, gender, women, first responder, ambulance, EMS, paramedic, fire firefighters, fire department, police, RCMP, and law enforcement. Time and budget constraints of this study limited the search to be completed during April 2023. The final search strategy can be found in Appendix 1.

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A search of CANLII using initial search terms provided 38 files related to GBV by first responders, however independent reviewers agreed to utilize only the titles as informing of the topic due to time constraints of the project. Search strategies included keyword and forward citation chaining. The 51 articles were divided and reviewed between the two reviewers, including a manual search of bibliographies occurred in 30 articles and full review of the 58 articles were completed between the independent reviewers. Descriptive analysis followed a descriptive-analytic framework based on population, context, and content. Themes emerged and were checked by independent reviewers for alignment, with one theme revised to include further information. No disagreements arose between the reviewers.



Results

This review revealed the evidence about gendered-based violence related to first responder education and work that helped us to develop some organizing themes, including similarities and differences in the findings. These and the evidence gaps found, provide us with fruitful paths to follow to further explore, explain and develop scholarship related to gender-based violence amongst first responders and mitigating factors.

There were five major descriptive themes to emerge: a) prevalence of violence across first responder practice, b) lack of education and training about GBV, c) responsibility to report, prevent and consequence, who owns burden to change, d) significant safety and competency in practice due to GBV and stress burden, e) unfair advancement and career progression opportunities based on gender.

Prevalence of violence

First responders are exposed to traumatic events and interactions on a constant basis, where they are witness to violence in real time, discovery, and investigation of violent acts on others. And in many cases are physically and or sexually threatened or assaulted themselves or witness their peer's violence experiences during their daily work. This significant exposure is two-fold as it is both direct and indirect and is known to be a common occurrence the daily aspects of first responder work (Danesh, 2020). Across first responder environments traditional masculine stereotypes, where men are thought to have a tough mentality, are considered to be more objective, and more likely to follow orders are considered high value traits. These traits are norms thought to be necessary to function well in the jobs of first responder organizations where violent altercations are possible, and controlling the scene is necessary (Angehrn, Fletcher & Carleton, 2021).

Descriptions of the work environment often detail the unpredictability of the job. Literature highlights the exposure to trauma and their mobile workplace, such as moving vehicles, difficult terrain, and people's homes as uncontrollable features of their profession (Maguire et al., 2014). Research suggests the aspect of control on the job is similar for police, fire, and paramedics, in that an uncontrolled environment must be made safe and manageable, regardless of the object of control (van Reemst, & Fischer, 2019). With this direct interaction with the public, first responders have a high risk of confronting violence in each event, together as responders and individually due to the stress of the public in these emergencies and the public space in which first responder practice is located (van Reemst, & Fischer, 2019). Hegemonic masculinity is the perception that to combat this type of potential and real violence in the workplace the masculine archetype of big, strong, brass, and tough is required to prevent the violence and enable the control of the situation. Traits such as expressing emotions, collaborating, or building consensus, or even taking precautions, are attributed to femininity, and not valued (Angehrn, Fletcher & Carleton, 2021). Study findings indicate female police officers recalled being ridiculed by the male police officers working alongside them for wearing protective gear at gun calls. The more feminine male police officers were thought to behave the more likely they were lower on the masculinity hierarchy and less likely to be considered an alpha male (Angehrn, Fletcher & Carleton, 2021).

There is emerging awareness that first responders are exposed to physical and sexual violence within their workplace settings, including the outcomes of violence perpetrated on others, with criminal or public safety, health, and social implications to which first responders must attend. Paramedics experience high levels of workplace violence, where its thought they have up to triple the amount of physical and verbal violence perpetrated on them in the ambulance by the patient, in comparison to other health care workers. In comparison, it is more difficult to understand how police and fire experience workplace violence by the public (Spelten et al, 2022). Formal recognition of violence in the first responder workplace is increasing alongside the focus on the workforce itself, and how first responders are experiencing and perpetrating gender violence, as well as the implications of this violence on the individuals, organizations and the served public (Murray et al, 2018; Donnelly, & Siebert, 2009). This is represented in the recent mixed-methods study comparing occupational injuries and fatalities across first responder work settings. Findings indicate that paramedics are like police and fire in relation to numbers of fatal injuries in the workplace, but the similarities do not exist in the comparison of non-fatal injuries between first responders. Paramedics currently have a higher rate of non-fatal workplace injuries than police and fire and a higher than national average when comparing to all workplace settings (Macguire, et al, 2018).

Findings from a Canadian paramedic study looking at self-reported workplace violence indicate that (Bigham, et al, 2014) the most common form of violence reported by paramedics was verbal assault, then physical assault, followed by sexual harassment and assault where patients were identified as the most common perpetrators of violence. The patient as perpetrator was common except where findings describe female paramedic intimidation which is more likely to be perpetrated by male peers and other male first responders such as police during shared workplace events. Forms of intimidation included verbal threats, threatening gestures, throwing objects, slamming doors, and threats of having the paramedic fired. Further, more female than male paramedics reported sexual harassment described as

the gambit of obscene gestures, propositions, derogatory epithets, slurs, and jokes where the perpetrators included patients, families, and co-workers (Bigham, 2014).

Study findings link job related stressors to higher risk for development of psychopathology for firefighters and paramedics. Its thought that this occurs in large part because of the high levels of workplace violence associated with unpredictable and dangerous environments that these first responders navigate (Setlack, Brais, Keough, Johnson, 2021). This study utilized survey methodology to explore relationships between workplace violence and psychopathology, finding pervasive links between these aspects of first responder work. Similar findings emerged in a study about female firefighters who experience elevated rates of suicidal thoughts and behaviors during their careers thought to related to job stressors (Hom, Stanley, Spencer-Thomas, & Joiner, 2018). Other findings support the knowledge that higher rates of mental health conditions in comparison to other types of workers is occurring for first responders which is due to organizational stressors such as workplace violence and lack of subsequent supports. In this scoping review (Edgelow, et al, 2022) it was found that police, firefighters, and paramedics identified negative organizational factors as lack of supervisor support, negative workplace culture and lack of coworker support. Awareness that workplace violence has increased over the past ten years exists in the organizations, yet mitigation and prevention strategies seem to be absent or ineffective (Maguire, ONeill, O'Meara, Browne & Dealy, 2018).

Women have continued to join the ranks of first responder professions in the absence of safe spaces and in the face of social resistance from male colleagues (Kelly, 2022). Deans (2017) tells us that in policing barriers still exist and are intended to ensure women remain subordinated. Officers indicate that after more than five years they were not seen as peers and were not accepted because of their gender, and that the environment was so hostile that they leave. Suggesting that sexism is so deeply rooted in the policing structure that women remain outside the policing norm and structure. Congruent with paramedics, where (Cash, et al, 2019) a study found female paramedics experienced more incivility from male counterparts and supervisors due to their gender. Women described experiencing a social resistance to their presence and their work. This resistance was performed by colleagues, particularly among paramedics and police officers. While many women described feeling well-supported by their immediate co-workers, they also noted a culture of specific language used to define women as separate from the rest of the workforce (Kelly, 2022)

Lack of education and training

Training and orientation for first responders includes significant amounts of time spent with preceptors, mentors, and peers to complete entry to practice certification and orientation. Throughout the work integrated learning, workplace orientation, and mentorship domains, first responders are paired with those already in practice who are tasked with teaching, evaluation and supporting the new learner and employee. Women are advised by mentors and other senior women to expect gender-based discrimination (Angehrn, Fletcher & Carleton, 2021) in the learning and workplace environments, that experiences of inappropriate sexual advances and predatory behavior by male superiors is common and requires their vigilance.

Socialization into the first responder organizations occurs within the practice education and workplace orientation models. Curriculum and policy about equity, diversity and inclusion is not available until

orientation or probation is complete. Students are not provided with any tools to deal with GBV in practice education settings. Of note is recent findings that indicate paramedic students are hesitant to report their exposure to workplace violence during practice education placements for fear of employment jeopardy. In this cross-sectional study of graduate paramedic students on clinical placement verbal abuse and intimidation were reported as common experiences by the students and further that student, regardless of gender are exposed to similar rates and types of workplace violence as their preceptors (Boyle & McKenna 2017).

Information from Canadian post-secondary institutions where much of the first responder education is provided, suggests that very little uptake of available equity, diversity and inclusion training occurs by students (only 31% have some awareness of the institutions education on gender-based violence) and the voluntary training, when provided sees very low participation by full or part-time students. It is unknown how first responder students fit into these studies as no disaggregated data is available (Burczycka, 2021). Key findings in Boyles study are that students need better education on recognizing and managing workplace violence, including gender violence, prior to attending clinical practice placements. The curriculum needs to ensure further understanding about why it's important to report all acts of violence and how to deal with the long-term impacts of their experiences of workplace violence as students. Further that a standardized curriculum should be developed and available across all programs and be a prerequisite prior to placement. (Boyle & McKenna 2017).

First responder views of how further education about gender-based violence could support them is inconsistent at this early stage where few studies have been completed. The divergent views focus on whether self-defense or de-escalation is an appropriate focus as a firefighter or paramedic as it should not be considered part of their job. This is very different than police who tend to normalize violence in the workplace and consider de-escalation and self-defense as important aspects of their education, albeit with differing views on what constitutes self-defense or de-escalation education (Spelten et al., 2022; Engels, McManus, & Herold 2020). In fact, much debate exists in the police discussion on the value and role of de-escalation and self-defense training where some share that this approach teaches hesitation or delay in action, which increases risk of harm to them. The response from many first responders includes aspects of scene and public control that is absolute, continuing to use current approach of establishing early and complete control to navigate the interaction in a safer way. There is to date little evidence that provides direction on this topic for first responders and further how the systems can begin to address real solutions for prevention and safety (Engels, McManus, & Herold 2020; Koeppel, Bucala, Kelley, Jitnarin, Poston, Haddock, & Jahnke, 2022).

Responsibility to report, prevent and burden to change

Significant gaps exist in available data and tracking systems that provide sufficient information to understand if physical or sexual assault violence is occurring, who perpetrators might be, and in what work or education spaces the perpetrator is enabled. Some indicators suggest the nature of organizational structure and work settings, alone with partners, away from supervisors enables aggressors more opportunity (Angehrn, Fletcher & Carleton, 2021). Reporting, metrics, and tracking data of violence in first responder organizations and specific gender-based violence data is not publicly available. Emerging in the evidence is information that those experiencing violence generally do not

report due to the real or perceived inability of their supervisor to deal with issue appropriately, and that consequential outcomes are recognized as negative for the person reporting the violence not perpetrating the violence. Women indicate that they choose not to report so that they don't ruin their careers or be labelled as troublemaker and seen to be weak (Angehrn, Fletcher & Carleton, 2021; Kelly, 2022). An aspect of reporting gender-based violence in first responder organizations is the question of what and how to report. Multiple studies findings indicate that participants agreed that harassment and sexism are so normalized in their first responder organizations that only the most egregious and visible cases are reported.

Many aspects of violence in paramedicine work setting go unreported as paramedics feel these don't warrant incident reporting given the barriers identified as lack of system supports, poorly designed reporting forms, and unsupportive supervisor responses (Bigham, 2014; Mauz, Johnston & Donnelly, 2020). Police officers report that what they experience daily would be considered harassment and assault in other fields. Further frustrations revealed the weakness of sexual harassment polices and reporting processes, as cumbersome, non-anonymized, and potential for retaliation because often the perpetrator of the violence is the first in the chain of command who they had directly to report their complaint. Another negative aspect of reporting in police specifically was the long wait to access an internal affairs officer and the lack of confidential access where often an officer had to report to a superior located within sight lines of the rank and file (Kelly, 2022). It is unknown whether first responder colleagues who witness GBV report or how they navigate the event in the moment and over time, what is known is that vicarious trauma and the potential negative outcomes is a new focus of inquiry within first responder research.

Increasingly, understanding about the dimensions of GBV as harassment from colleagues or superiors taking many forms, both overt and covert, is improving. What was once perhaps accepted as dark humor or poor behavior in the past is now understood to be unwanted harassment and criminal activity. In the past what was accepted as minor bullying and discrimination are now recognized as microaggressions, vertical and horizontal violence and hostile sexism. This naming of the behaviors and understanding of the power structure relationship is helping to move past acceptance and normalization of the behavior to a safer space for all practitioners. Women have reported feeling unsafe with a colleague or a superior officer, being groped between their legs in a patrol car by their training officer, being sent pornographic images, receiving a message from a colleague mentioning that he was masturbating while thinking of her, and having sexual objects such as sex toys, put in their workspace by their colleagues are now not seen as dark humor but as the sexual harassment it is (Angehrn, Fletcher & Carleton, 2021).

New findings from first responder women indicate they are now more aware they are experiencing specifically gender-based discrimination from their peers and their colleagues. Along a continuum from blatant, outright disrespectful, and unsafe behavior at the individual level with peers, to covert and subtle systemic misogyny. Of note is the perspective developing in police that intentionally questions the professional acceptance of sexism being the burden of women when the onus of burden should be placed on the men to prevent or not perpetuate gender-based violence (Angehrn, Fletcher & Carleton, 2021). This is revealed often in the first responder workplace when superior officers or work partners who are male tell first responder women to not be offended by misogyny or sexism, that its just the way of the world, or further, when women are assigned work tasks because of their gender. This burden is

also revealed when women must work harder and prove themselves more than men to get promoted and to become leaders. First responder women are disrupting this conversation, such as police officers who are demanding that the norms of disrespectful behavior against them by their male counterparts is no longer acceptable and the onus for change is placed on the males acting in that way (Angehrn, Fletcher & Carleton, 2021; Kelly, 2022).

Safety and competency in practice

New understanding is emerging about the impact of workplace and gender-based violence on the patient and community to which first responders provide care and service. The organizational stressors due to gendered violence, such as bullying and sexual assault have direct repercussions on how well the first responder is able and willing to provide what is needed to serve in their roles. (Condon, 2015; Wright & Khatri, 2015). Studies are revealing that an organizations inability to address and prevent workplace gendered violence is linked to patient and community outcomes in negative ways. A 2014 study indicated after experiences of being groped, fondled and or pulled onto the stretcher by the patient, paramedics felt their personality at work changed. These paramedics and police officers indicated that they became more distrusting, quick-tempered, and timid at work, and felt much less empathy for peers and patients. Further, that they felt more fearful for their safety and would request other first responder back up more often because of these experiences (Bigham, 2104; Angehrn, Fletcher & Carleton, 2021). This trajectory may impact the care provided as paramedics will keep distance, gather less information and be less inclined to touch the patient or engage with the public, without others or specific safety mitigation factored into the event. This pathway of repeated workplace violence, regardless of gender and perpetrator, can lead first responders to develop depression and a lack of interest in future opportunities which is shown to result in early career leaves (Bigham, 2014; Parzefall & Salin, 2010). First responders attribute more of their work-related stress to organizational culture than the actual work they do. Workplace burnout and professional incompetence are outcomes related to public safety as a direct result of workplace gendered violence.

Safety in first responder work is a key component of practice, in relation to the patient and the practitioner. All three practice settings require specific uniforms, vehicles, and equipment, including personal gear that is designed to protect and serve the first responder in many of their workday tasks. From a safety perspective, each first responder must wear standardized gear, fire turn-out gear, police bullet-proof vests, paramedic safety vests, helmets, gloves, glasses, specialized boots and each first responders wear a duty belt that holds a radio, handcuffs, tasers, gloves, scissors, and stethoscope. Uniforms are issued and consist of shirts, pants, and epaulets, all which signify rank and role based on color and insignia. Equipment, and attire supplied is still sized and designed for a male norm and utilization, putting women at a significant safety risk and potential performance gap. And many women described feeling unprofessional, or unsafe when having no other choice but to wear poorly fitting uniforms (Kelly, 2022).

Women in professions where men regularly outnumber them are more likely to be subject to aspects of tokenism, such as increased visibility and scrutiny from their colleagues and management. This ratio can contribute to precarious reputations and may result in women having to perform tasks which may not be adapted for their bodies, in uniforms and with equipment that is also not adapted to their bodies.

Uniforms and equipment are ill-fitting for females putting them at a career disadvantage. Ill fitting turnout gear or uniforms, reduces mobility limiting the ability to perform physical tasks efficiently and safely, increasing risk for injury or fatality (McQuerry, 2020). Turnout gear is designed for the male body, adding increased physical stress on a women's different body size and frame. In firefighting organizations, 80% of female firefighters have identified issues with ill-fitting PPE, which is four times greater than their male counterpart (McQuerry, 2020). There are significant concerns raised by women first responders about their equipment that in many ways is not designed for them. Given that fitting gear is more likely attributed to luck, rather than to sufficient planning and organization, speaks to the daily challenges that some women continue to face at work with decision-making that de-prioritizes women's safety and inclusion. In the absence of such supports, women persist by attending to their own needs and often find creative ways of assimilating and succeeding in male-dominated workplace cultures, such as using disposable paper funnels designed to facilitate a woman in urinating without having to remove her clothing or sit down (Kelly, 2022).

Safety at work is an aspect of physical and mental toughness that are thought to be a significant dimension of violence between first responders. Where police, fire and paramedics require initial and ongoing physical standards to be met to gain employment, women are seen as disrupting and lowering this high standard and are in some cases considered unsafe by their peers due to their physical stature. Police and fire have cultural beliefs about physical size and stature that remain the norm, where size, shape and appearance norms underpin acceptance by peers (Westmarland, 2017; Ballaro, & Blanchard, 2018; Boorady, et al, 2013; Dawes, et al, 2023). These studies indicate that body stature is considered part of the professional identity and norm of first responders which underpins competency, and subsequently value and acceptance in the workplace (Turner, 1996). This leads to acknowledgement that gender will then play an important part of bodily identity, where value for women is more likely to still be based on society norms of sexual attractiveness rather than capabilities for first responder tasks. A dimension of this bodily identity is linked to hegemonic masculinity in that much of the work that is done by police, fire and paramedics can be completed by any body shape or size that is not related to gender (Butler, 2004). When gendered thinking links bodily identity to gender, the evidence suggests women are automatically assessed for capabilities for childbearing and caring which creates bias by peers and supervisors who may behave differently to their female co-workers based on this assumption (Westmarland, 2017). Other outcomes in the linking body identity and gender in the workplace is reported when women are assumed to be more capable dealing with female patients or complainants experiencing sexual assault or menstrual pain because of gender, which leads to gendered women's work regardless of competence or ability.

Unfair advancement and career progression

Many women in first responder organizations report that when they advanced into a different role, they would experience negative responses from colleagues and would be judged more harshly, criticized, and undermined by colleagues. Advancing to higher positions in policing organizations is thought to take longer for women despite being qualified and able to perform well on recruitment and technical tests. Some of these experiences cause women to not pursue advancement or progression in their careers. Women report that even when considering objective measures intended to ensure fairness for all, much of the recruitment and selection for advanced positions remains biased and distant from merit-based and positive performance-based progression (Angehrn, Fletcher, & Carleton, 2021). While there seems

to a growing number of women entering first response careers, it is still significantly lower than males. (Frazer et al., 2020) and although there have been improvements, there continues to be unfair practices, harassment, hostility, and gender disparity driving an unknown number of females to leave first responder careers (Ballaro & Blanchard, 2018)

These gendered experiences cause increased stress for women who must manage the added stress of gender bias, and discrimination within their workplace. Additionally, women report they consistently experience sexual harassment and underestimation of their physical abilities (Morash, et al, 2006). First responder women experience high levels of sexual harassment, which are considered the most salient and distressing by them. In most reported cases the perpetrator of sexual harassment was a close peer or supervisor or superior which hampers any opportunity for advancement and career moves. Types of sexual harassment included being groped, sent pornography and being the object of sexual jokes, all reported to occur in the squad car, the ambulance and in the fire hall (Kelly, 2022; Angehrn, Fletcher, & Carleton, 2021; Burczycka, 2021). Of note, is that each of the participants in these studies were aware of at least one other woman who had experienced gendered violence in their respective organizations and in some cases were witness to those events. Gender-based violence amongst first responders can include a wide range of behaviors, many which are overt and many that are subtle, all which create unsafe spaces and have negative implications on career progression.

Other emerging evidence indicates that the low number of women in firefighting roles begins with the recruitment stage and follows through career stages in many ways (Ballaro & Blanchard, 2018). It was found that the recruitment is biased, where women often challenge whether they are being objectively assessed in the physical and technical testing processes. Women report an ongoing frustration with ill-fitting gear and equipment built for men and that fire-hall and ems-station living felt lonely and unsafe. These findings also suggest that the low numbers of women in the fire service can be attributed to ongoing sexual harassment in the work setting. Although some improvements have been made over the years, unfair practices, harassment, hostility, and gender disparity remains the major reasons why few women seek the fire service as a career (Ainsworth, 2014; Hom, Stanley, Spencer-Thomas & Joiner, 2017; Jahnke et al., 2012). Similarly, recruitment of female first responders has been hindered by the mentality of "old boys club" (Angehrn, Fletcher, & Carleton, 2021). Women are often thought to be unable to complete aspects of the physical requirements, especially for fire fighter recruitment due to the female bodies anatomical and physiological differences from men. (McQuerry, 2020).

A significant dimension of gender-based violence link career opportunities across first responder work settings being disproportionately unfair for women due to societal and cultural expectations of women to have or have potential responsibility as a mother and to their families. Women in first response have been burdened with inequalities in comparison to their male counterparts in anticipated and assumed future family planning, regardless of the individuals' intentions or status. From this perspective women in first responder professions are consistently navigating gender scripts when it comes to attaining and advancing in their roles. Women in our society are still largely regarded as responsible for raising children, performing domestic duties, and in particular bearing the weight of balancing family demands with their careers. Study participants, such as a primary care paramedic, described how women first responders are no exception to these expectations (Kelly, 2022) as organizations within the field of first response work do not provide formalized support for childcare and very few options for shifting work

hours or responsibilities. This is reported to be even more difficult for women whose partners are also working in the first responder sectors, where the women have even more limited choices.

Pregnancy at work and navigating maternity and parental leave and responsibilities are emerging as complex aspects of gender-based violence. Women report feelings of being shamed when pregnancy results in light duties and maternity leave (Angehrn, Fletcher, & Carleton, 2021) because this is viewed as putting increased workload pressure on colleagues. Further, women who might consider career advancement and then go on maternity leave are judged harshly and viewed as taking the opportunity away from someone more deserving who would commit to be present. Women who have chosen to have more then one child are viewed negatively by first responder peers when returning to work after multiple leaves where their competence and commitment are challenged. In some cases, women in this study reported on the complex feelings they develop about competence and commitment after moving from light duty assignments while pregnant to different shift options to manage family and career which results in shaming and ghosting by peers when they return to full practice. Further complications of this dimension include the evidence that shift work impacts both mental and physical health of the female first responder, where hormone level changes can alter menstrual cycles, there is increased risk for spontaneous abortion, low birth weight and prematurity, as well as early menopause (Wilson et al, 2022). Some solutions women are creating include organizing training and education to align with pregnancy and parental leave plans and organizing cooperative childcare options. They are also returning to work early to ensure promotions are not missed and to guard against being perceived as uncommitted to their careers.

Implications

Many initiatives developed by first responder organizations to improve gender diversity and equality seem to be failing. Increasingly, media coverage indicates that women in these education and work settings are experiencing GBV by their male counterparts. First responders bring their clinical and technical knowledge, cultural situatedness and understanding of policy interpreted through their own complex individual frameworks of values-based judgements and evidence-based expertise to make and implement decisions at work. (Holt-Lunstad, Smith, & Layton, 2010). First responders interpret their values in relation to their practice and how they negotiate their own vulnerability within the power dynamic when engaging with their peers during learning work placements is unknown (Silvestri,2017). The male dominated, paramilitary organizational structure is underpinned by a command-and-control approach where hegemonic masculinity is still highly valued. These are complex interactions between male and female first responders and their ecosystem, still considered doubly male dominated (Crosby, 1987) in that not only are there still more men than women in the organizational workforce, but the culture also remains an extension of the masculine stereotypes.

Gender based violence is rooted in gender inequality and is considered a significant human rights violation. Gender stereotypes across first responder professions include tropes of masculinity linked to the physically strong, macho, leader type role where feminine tropes are more likely to include traits such as weak, submissive, and caring. Identity in these sectors is thought to be constructed on cultural symbols of masculinity, which includes aggression, seeking dangerous situations and work, and bonding via hazing where male superiority is reified and normalized. This is revealed when an all-female air

medical crew, all female firefighter pump crew, or all female police tactical unit are identified as unique, and able to provide other types of nurturing care, further portraying the male as the norm. (Martin & Jurik, 2007). When all female crews are identified as other than the norm, the assumption is then that most crews are male. Extreme hegemonic masculinity is valued in first responder organizational culture, where many male firefighters, male police officers and male paramedics represent their idealized version of first responder capability through their physical strength and size. This idealized version while not held by all, is held by enough people in the organizations to influence how women experience first responder education and workplace conditions. If enough leaders and decision-makers value and hold true the notion of the male archetype as required for success as a first responder, the norm will continue to exclude women, and continue to consider them as subordinates with no authority regardless of rank, experience, and expertise. Disrupting and deconstructing hegemonic masculinity is part of improving unfair practices, reducing gender disparity and hostile sexism, a decrease in the ongoing harassment of women in first responder organizations (Hom et al, 2017). While workplace culture is thought to be a protective factor in demanding and stressful occupations such as first responder work, in many cases is acts as a barrier to belonging and trust for individuals who exist beyond the margins of inclusion (Murray, 2020).

Emerging evidence demonstrates how first responder organizational structures enable unsafe practices and spaces for women. The command and control, paramilitary organizational structures are known to be insular, self-regulating with very little external oversight or insight of best practices. Traditions of hazing, inappropriate humor, ridicule, sexual harassment, and outright bullying are still in place and accepted as just part of the way it is done, to make you tough enough to do the job. There is emerging theoretical understanding of how self-categorization theory underpinned by interaction rituals can now help us understand how negative culture is developed in first responder organizations that utilizes isolation and harassment as a key bully tactic for those outside the norm (Walker, 2018). This may help us to better understand how to address gendered assignment of duties across first responder workspaces. Gendered assignment is just another form of tokenism, where the female first responders are considered first because of their gender instead of their competence and skills. This conflict women first responders must navigate puts work identity and gender identity at odds where its thought that this issue would be lessened with gender parity. All first responders may bring unique skills to the workplace, yet all women are assumed to bring emotional capacity, maternal instincts, and empathy because of their gender, a construct developed with little supporting evidence.

Tokenism and gender-matching of assignment only happens for women first responders, not male police officers or male paramedics or male firefighters and has significant implications. Colleagues and women first responders come to expect gender matching of assignments by their superiors which undermines the credibility and calls into question the competence of the women (Crosby, 1987; Blau, et al, 2014; Emanuel, 2019; Koeppel,2022). This approach to assignments entrenches the stereotypes of gender where men are physically strong, and women are good listeners. This continued gendered violence against women in first responder organizations can erode their and their peer's confidence in their competence and abilities (Griffith, Roberts, & Wakeham, 2016). Gender scripts as noted here ultimately weaken women's value in first responder communities while reflecting societal trends where women's roles are gendered through benevolent and hostile sexism. Further, the normative power held in being

male provides some insight into gender power dynamics and culture within male-dominated first responder organizations (Angehrn, Fletcher, & Carleton, 2021).

Reporting, tracking and surveillance of gender-based violence amongst first responders is a complex issue. There are few reporting and tracking systems in place, and many first responders are fearful of not only negative workplace implications, but their own overreaction to the experience of violence in the workplace amongst co-workers. It is thought to be difficult for everyone to discern what is just the culture and what is gendered based violence (Emanuel, 2019; Gregory, 2022; Gumussoy, et al, 2021; McKay, 2014; Koeppel,2022). This inability to understand what, when and to whom to report is an opportunity to improve how women experience the consequences of gender-based violence.

Standardization of definitions of violence in relation to and within the context of first responder peer interaction and workplace policy is required to enable a reliable data tracking and surveillance system (van Reemst, & Jongerling, 2021; Moore-Merrell, 2017).

Within first responder organizations, human resources divisions have a role to play in developing both recruitment and retention programs that ensure performance is evaluated based on merit, and reporting systems and supports are available to women experiencing gendered violence by other employees. Some first responders opt out of reporting or filing complaints because of their perception and in repeat events, experience, with the long and arduous process to access and completion of the paperwork. Women find this too distressing and consider the multiple interactions with human resource people could put them at risk for repercussions because "everybody knows" (Angehrn, Fletcher, & Carleton, 2021; Glick, & Fiske, 1996; Mauz, Johnston, & Donnelly, 2020; McKay, 2014).

Conclusion

Increasingly, women are choosing to join the ranks of first responder professions of police, fire, and paramedicine. This review has revealed the literature gaps and available data to help understand the dimensions and aspects of gender-based violence that first responder women experience during their training and practice. There are cultural and structural barriers that enable gender bias, discrimination, bullying and sexual harassment across the ecosystems of first responder organizations. Hegemonic masculinity is thought to underpin the experiences of gender-based violence amongst first responders and women in these doubly male environments struggle to progress through their career advancements due to biased boys only club thinking. Disrupting the structure of paramilitary hierarchal organizations and providing alternate pathways for reporting of issues would change the landscape for women. Until then women will continue to carry the burden of developing a solution and continue to make strides in achieving higher leadership roles and break down presumptions of incompetence based on gender.

Knowledge Mobilization

Knowledge mobilization is the activities of connecting academic research with knowledge users, including decision and policy makers to improve policy development and to advance social innovation by informing the community. This study methodology includes knowledge users' voluntary participation to inform how best to address innovation in mobilizing the findings of this review and includes the development of a first responder student researcher. The approach includes development of new

relationships with partners in first responder communities. The following presents some of the planned initiatives based on early discussion with participants, further knowledge mobilization activities will be based on further participant discussions.

- publish in peer reviewed journal.
- include report findings in curriculum of first responder training programs
- conference presentations
- publish report in first responder newsletters
- publish report and supporting media on public website https://jibc.arcabc.ca/islandora/object/jibc%3Acar
- partner presentations and media development

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Appendices

Appendix 1

Search Strategy for Google Scholar (Literature Search performed April 2023)

- 1. Gender, career
- 2. Peer violence
- 3. Female experience
- 4. Culture
- 5. Internal violence

- 6. Discrimination
- 7. Stereotype
- 8. Violence amongst first responders
- 9. Attitude
- 10. Behaviour
- 11. Sexual violence
- 12. Gender roles
- 13. Workplace bullying
- 14. Workplace harassment
- 15. Gender stats workplace
- 16. Occupational roles
- 17. Sexism
- 18. Teamwork
- 19. Male dominated field
- 20. Emotional abuse
- 21. Bullying and harassment reporting
- 22. Gender bias
- 23. Student
- 24. Equality
- 25. Recruitment