A descriptive study of paramedic response to workplace violence in Canada

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Introduction

Decades of empirical evidence highlights that persons employed in the healthcare field are at risk for exposure to violence. Given the nature of their occupation, Emergency Medical Service (EMS) (e.g., paramedics) personnel are at a heightened risk for exposure to violent encounters in the field and within institutional settings[1]. For instance, in a one-year period, scholars estimate that roughly 75% of Canadian EMS personnel will be a victim of some form of violence[2].

Unlike most hospital settings, strategies to mitigate violent events is largely absent in EMS. One potential option is to develop prevention-based policies, to make EMS work environments safer. An initial evidence-base of what factors are associated with violent acts and how these are processed by the victims is necessary to generate such policies. For the current study, we investigate two research questions.

RQ1) What are the context-specific, patient specific, and demographic or paramedic-specific characteristics that are associated with violence and aggression against EMS personnel?

RQ2a) What is the level of fear associated with violence against EMS personnel and *RQ2b*) what parties do victims consult after the event?

Methods

Design

Self-report victimization data were captured through an online questionnaire housed on a server at the Justice Institute of British Columbia. The survey was made available to Primary Care Paramedics (PCP) and Advanced Care Paramedics (ACP) employed through the Alberta College of Paramedics.

Questionnaire

Using previous research as a guide[3] a 96-question survey retrospectively (within the last 12 months) investigated the factors associated with five forms of violence: verbal assault, intimidation, physical assault, sexual harassment and sexual assault (*RQ1*). Post-event data was also captured for the degree of fear (*RQ2a*) and what social group each EMS spoke with following the violent encounter (*RQ2b*).

Analysis

Descriptive statistics were used to report the demographics between victimized and non-victimized participants. Cross tabulations were used for factors associated with violence and well as for post-event findings.

Results

Table 1. Victimized versus non-victimized EMS personnel (RQ1)

	Victimized n (%) of mean (std. dev)	Non-victimized n (%) of mean (std. dev)
Age, yr	37.6 (9.6)	39.6 (11.9)
Experience, yr	12.5 (8.5)	14.2 (10.6)
Exposure, hrs	45.2 (9.7)	43.6 (10.4)
Sex		
Female	93 (35.6%)	13 (32.5%)
Male	168 (64.4%)	27 (67.5%)
Job role		
ACP	144 (55.2%)	19 (47.5%)
PCP and other	117 (44.8)	21 (52.5%)
Community served		
Pop > 100K	139 (53.3%)	26 (65%)
Pop < 99K	122 (46.7%)	14 (35%)
Total	**261 (86.7%)**	**40 (13.3%)**

Table 2. Frequency of violent events (RQ1)

Type of violence	Once (%)	A few times (%)	About once a month (%)	About once a week (%)	Daily (%)
Verbal abuse	0.7	26.5	19.9	26.5	8.9
Intimidation	14.6	19.5	8.9	6.0	3.0
Physical abuse	10.3	17.2	5.0	1.7	1.0
Sexual harassment	4.6	6.6	1.7	1.7	0.7
Sexual assault	1.3	0.7	0.3	0.3	0

Table 3. Factors associated with violent events which occurred during work (RQ1)

Type of violence	Time of incident: Day Shift / Night Shift	Most Common Location(s)	Most Common Perpetrator(s)
Verbal abuse	50.6% | 49.4%	Private residence (30%); Usual work location (30%)	Patient/client (67.2%); Patient/clients family (12.1%)
Intimidation	61.8% | 38.2%	Usual work location (38.2%); Private residence (28.7%)	Patient/client (35.7%); Work colleague (24.8%)
Physical abuse	38.5% | 61.5%	Public space (39.4%); Usual work location (26.9%)	Patient/client (92.3%)
Sexual harassment	56.5% | 43.5%	Usual work location (63%); Public space (21.7%)	'Other' (67.4%); Patient/client (23.9%)
Sexual assault	25% | 75%	Public space (75%)	Bystander (87.5%)

Table 4. EMS response to violent events (RQ2)

	RQ2a	*RQ2b*		
Type of violence	Fear level[1]	Talk to family or friends	Talk to coworker	Talk to supervisor
Verbal abuse	2.01	82.7%	90%	72.7%
Male	1.90	79.6%	90.1%	69.8%
Female	2.22	88.5%	89.7%	78.2%
Intimidation	2.29	85.4%	91.8%	70.9%
Male	2.17	82%	95.5%	69.7%
Female	2.45	89.9%	87%	72.5%
Physical abuse	2.78	80.2%	90.6%	73.6%
Male	2.70	78.8%	95.3%	72.7%
Female	2.93	82.5%	82.5%	75.0%
Sexual harassment	2.02	91.3%	89.1%	69.6%
Male	1.60	88.2%	88.2%	47.1%
Female	2.28	93.1%	89.7%	82.8%
Sexual assault	2.88	100%	87.5%	62.5%
Male	2.00	100%	100%	100%
Female	3.40	100%	80%	40%

[1]Level of fear ranged from 1 (low level of fear) to 5 (high degree of fear).

Discussion

Results indicate that approximately 87% of front-line EMS personnel are exposed to some form of violence. Several factors were correlated with the likelihood for violence, particularly those cases where the perpetrator had used substances (such as drugs and/or alcohol).

Many instances of violence were relatively minor with 52% of cases resulting in no immediate response from the paramedic. Comparable to other work in this domain[4], victims often debriefed with coworkers and family members as opposed to supervisors and medical professionals. In general, a greater number of females (compared to males) debriefed with family/friends and supervisors, whereas a greater number of males debriefed with colleagues—with some exceptions. Females also reported a higher level of fear in response to all forms of violent events.

This study helps to bring empirical awareness to the spectrum of violence against EMS. More research is needed, but preliminary policy development to prevent or mitigate the impact of violence against EMS should consider:

1) The impact of prolonged exposure to habitual verbal abuse and harassment on long-term well-being in EMS personnel;
2) That, in addition to post-event resources EMS personnel (e.g., CISM teams), policy makers should consider the potential vicarious traumatization on spouses, friends, and coworkers; and
3) High rates of sexual violence towards female EMS coupled with a low proportion that are likely to be reported to supervisors suggests a need to improve reporting mechanisms. Trauma-informed sexual assault investigative practices is a potential option[5].

References and Acknowledgements

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Acknowledgements

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