Characterizing Workplace Violence in the Emergency Department Through Direct Observation of Violent Encounters

Elizabeth Rosenman, MD,

Director of Simulation Assistant Professor Department of Emergency Medicine University of Washington

September 25, 2018 Washington State Governor's Industrial Safety and Health Conference







Disclosures

 This study was funded by the Washington State Department of Labor and Industries Safety and Health Investments Projects program.

No conflict of interest to report





Acknowledgements

- Marie Vrablik, MD, MCR (PI)
- Rosemarie Fernandez, MD (Co-PI)
- Nancy Simcox, MS
- Anne Chipman, MD, MS
- Megan Moore, PhD
- Karl Jablonowski, MS
- Ly Huynh, BA
- Sarah Parker, PhD







Workplace Violence (WPV)

"...any physical assault, threatening behavior, or verbal abuse occurring in the work setting"

(National Institute for Occupational Safety and Health, 1996)



Type 1: Criminals



Type 2: Customers



Type 3: Employees



Type 4: Related Parties

Image credit: emilms.fema.gov









Since 1999 healthcare settings in WA have been required to implement plans to protect employees from WPV (Chapter 49.19 RCW)







Most ED healthcare workers will experience a physical assault from a patient or visitor





Barriers

- Understanding the problem:
 - Data collection is often retrospective
 - Reporting is often limited to physical injuries
- Violence prevention (Foley, 2012):
 - Insufficient staffing
 - Inadequate violence prevention training
 - Sporadic management attention to the issue





Study Objectives

- To better describe assaults on healthcare workers in the ED
- To explore ED staff reactions to and perceptions of WPV
- To evaluate anxiety and stress levels in ED staff following a violent encounter





Study Design

- Prospective, observational, mixed methods study (1/2017- 7/2017)
- Emergency departments (EDs) at 3 hospitals
- Direct observations
- Staff interviews
- Psychosocial impact
 - State-Trait Anxiety Inventory (STAI)
 - Stanford Acute Stress Response Questionnaire (SASRQ)





Sites

Harborview Medical Center (Site 1)

Level I trauma

- 413 hospital beds
- 48 ED beds
- 63,218 ED visits (2017)
- 21% admitted
- Median LOS 4.58 hours

University of Washington Medical Center (Site 2)

Tertiary, university

- 450 hospital beds
- 23 ED beds
- 28,758 ED visits (2017)
- 24% admitted
- Median LOS 4.85 hours

Valley Medical Center (Site 3)

Public, community hospital

- 303 hospital beds
- 55 ED beds
- 81,539 ED visits (2017)
- 14% admitted
- Median LOS 3.0 hours

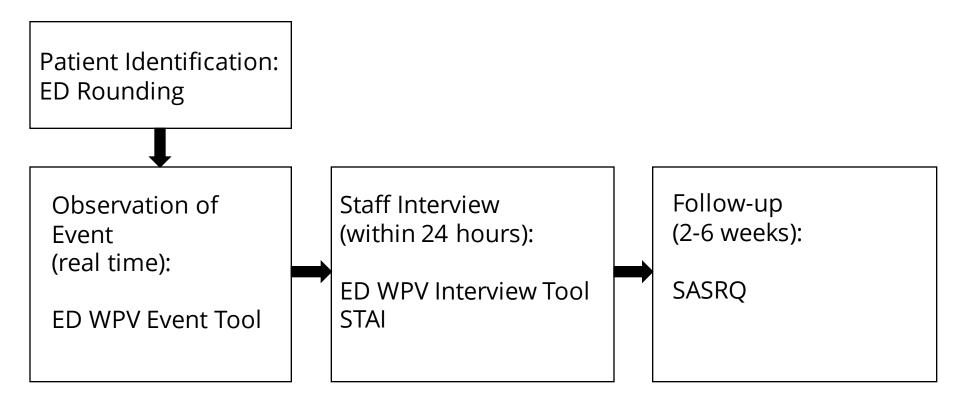








Study Design: Outcomes









Study Design: Outcomes

Patient Identification: ED Rounding

340 hours of observation 184 screen-ins

Staff Interview (within 24 hours):

(real time):

ED WPV Interview Tool

STAI

Follow-up (2-6 weeks):

SASRQ

SASRQ



N = 107



N = 23





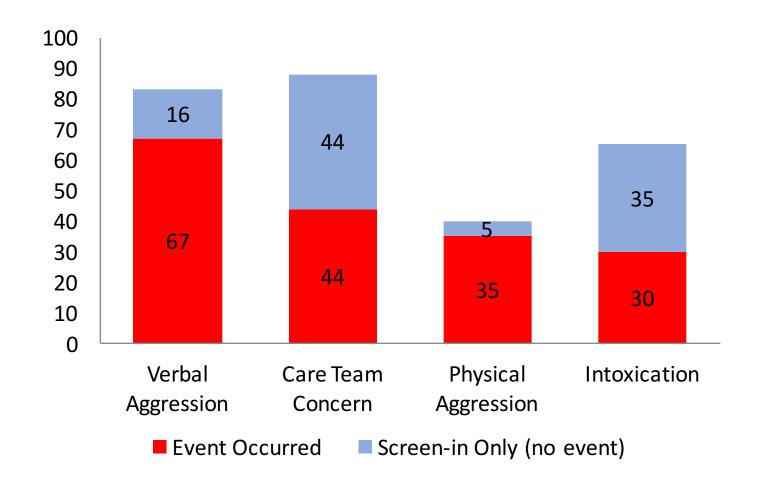
N = 19

Events reported to the institution? 4 (3.7%)





Results: Screen-In Triggers

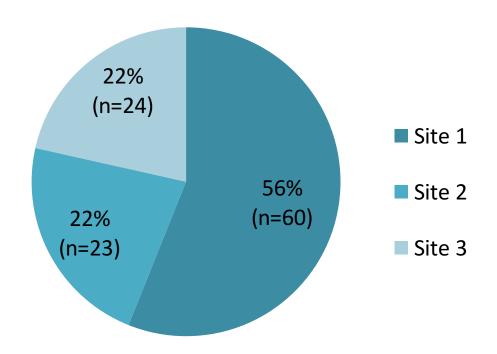








Results: Events By Institution



Site 1 averaged 1 event every 2.4 hours





Outcomes: Event Observations

Observation of
Event
(real time):

ED WPV Event
Tool

Staff Interview
(within 24 hours):

ED WPV Interview Tool
STAI

N = 107

N = 23

Follow-up
(2-6 weeks):
SASRQ







ED WPV Event Tool

Event ID:		REDCap ID:		4	D	ata Col	lector:	
Hospital: HMC UWMC VMC	PRMCE	Location/E	Bed:					
Date/Time Screening Began	22	Date/Time	Event Be	gan			_ Estimat	ted? Y/N
Date/Time Screening Ended		Date/Time	e Event En	ded			_ Estimat	ted? Y/N
Aggressor Type: Patient Visitor RA witnessed: Verbal Aggression *End disposition: D/C Admit	Physica	l Aggressior	n Neit	her		ntoxica	ted Care	: Team Concer
Event was:	Aggressor	gender:	M F I	JNK				
Entirely observed by RA	-							
Partially observed by RA	*Aggresso	r arrival mo	de to ED] [Day/Time	
Entirely reported to RA	Ambulance	Other			<i>•</i>	Admitted		
Partially reported to RA	Walk-in		Unkno	own			to ED	
Who experienced initial assault?	Brimary la	nguage Engl	ich2 V	N No	nyorba	al Lini	7	
Physician (resident/attending)	Trilliary la	iiguage Liigi	1511: 1	N NO	IVCIDA	ai Oivi	N.	
Nurse	*Restraint	s placed?	Υ		N		UNK	
MA	Physical	Before	During	Aft	er		UNK	
Security	Chemical	Before	During	After			UNK	
Paramedic	*Screened	/searched h	efore even	+?	Υ	l N	UNK	
Environmental Services		*Screened/searched be *Weapons found?			Y	N	UNK	
Volunteer	*When?	Before			UNK			
Other:	*Type(s)	Gun	Knife	Club/ba	0203000	N.	1ace	
Unknown	''ype(s)	Taser	Razor	Brass k			harp object	
		Other:	Titazor	I Diass K	nacidi	55 5	narp object	









ED WPV Event Tool

Ve	rbal Aggression
	Yelling at care provider
	Threatening
	Cussing
	Lewd/explicit statements
	Derogatory statements
	Other:

Ph	ysical Aggression
	Threatening gestures
	Kicking
	Punching
	Biting
	Spitting
	Scratching
	Slapping
	Pushing/shoving
	Flailing
	Sexually inappropriate bx
	Removing IVs
	Staring
	Pacing/refusing to stay in bed
	Leaving assigned care area
	Approaching team repeatedly
	Destroying property
	Cannot clearly define
	Other:

Other:			

ow many of each responded/ ere affected?
Resident physician
Attending physician
APP (ARNP/PA)
Nurse
MA
Security
Paramedic
Environmental Services
Volunteer
Other:
Unknown

*Did other patients respond?	Υ	N	UNK

Was aggressor in hallway during event? Was aggressor in psych area during event?		Y	N	UNK
		Υ	N	UNK
*How long in bed?	Estimated?	H:		M:
*How long in ED?	Estimated?	H:		M:

*Response system activated?	Y	N	UNK
*Closed loop?	Υ	N	UNK
*Response time? Estimated?	H:		M:

Change in environment 30 minutes prior?	Υ	N	UNK

* Ask Care team

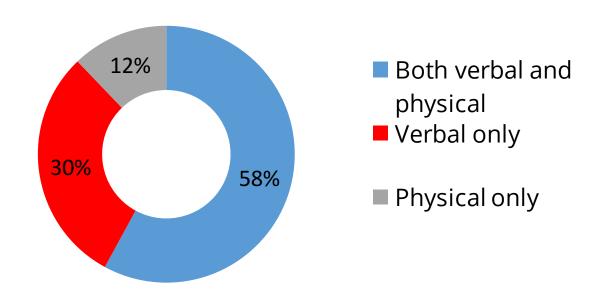






Results: Types of Aggression

% of subjects exhibiting aggression (n=107 events)

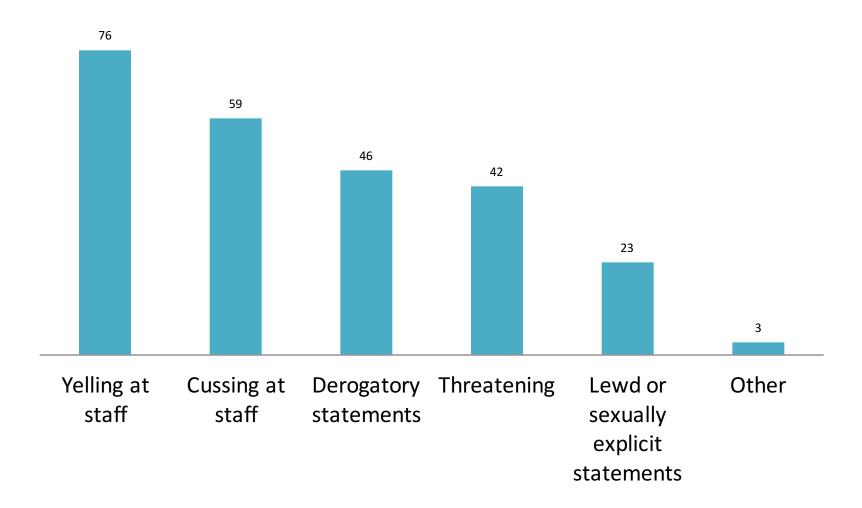








Types of Verbal Aggression

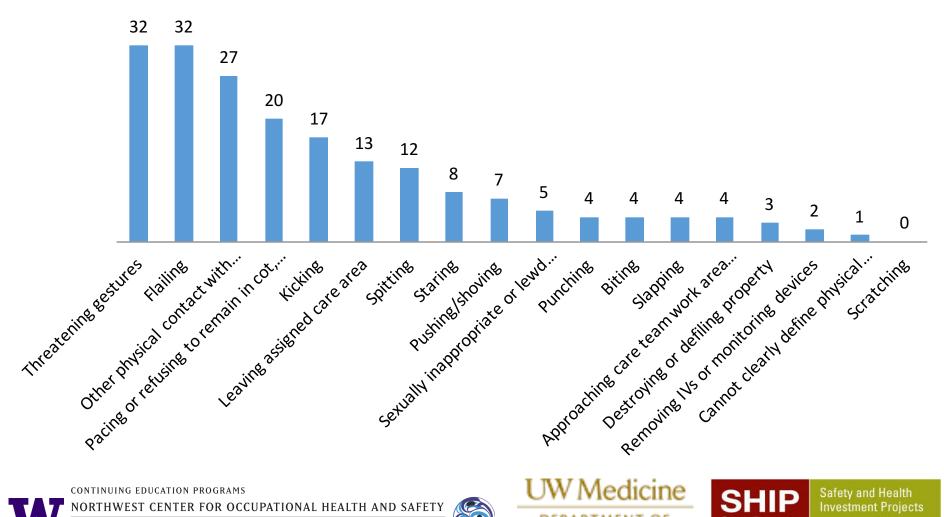








Types of Physical Aggression



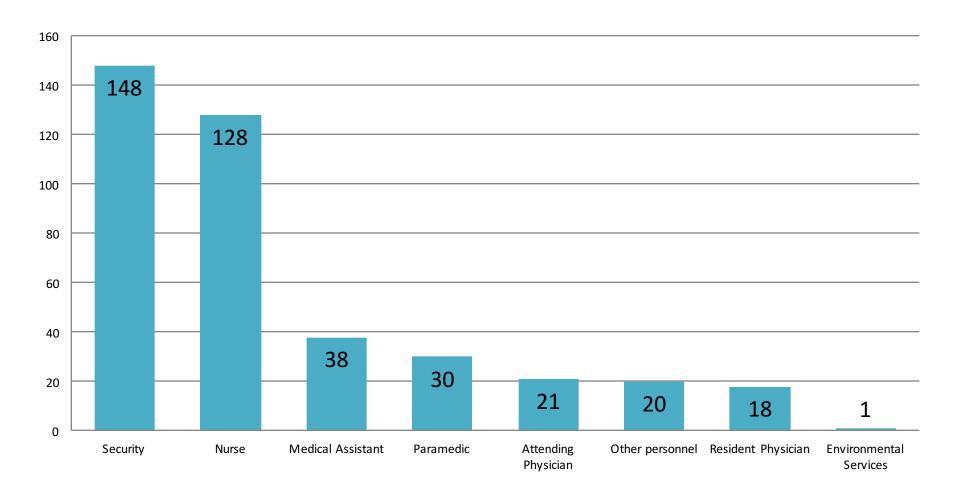








Staff Involvement by **Profession**











Outcomes: Staff Interviews

Observation of Event (real time):

ED WPV Event Tool

Staff Interview (within 24 hours):

ED WPV Interviews STAI

N = 107

N = 23

Follow-up (2-6 weeks):

SASRQ

N = 19







Interviews: Qualitative Analysis

- 23 transcripts from interviews
- Codebook development
- 5 coders
- Double coded and adjudicated





Interviewee Demographics (n = 23)		
Male (%)	10 (43)	
Female (%)	13 (57)	
Age Mean (SD)	35 (9)	
Years of Experience in Healthcare Mean (SD)	10 (7)	
Years of Experience in Emergency Department Mean (SD)	6 (5)	







Interviewee Profession (N = 23)	Number (%)
Nurse	9 (39)
Security officer	5 (22)
Medical assistant	5 (22)
Physician	2 (9)
ARNP	1 (4)
Social worker	1 (4)







Normalization of workplace violence

"And I think for me, because it is ER, I have to mentally prepare myself for whatever I might see in the ER. And it's like, hey, it's part of my job. It's what I signed up for. It's what I have to do. " – 19, Security Officer





Challenges with team dynamics

"So I just felt like it was an unclear ... it was not clearly communicated between physicians, nurses and security how we were going to best approach this gentleman." – 102, Nurse





 Coping mechanisms – taking a break, talking about it

"Just leaning on my co-workers, essentially. Just talk through it with them and move on." – 23.1





Or not coping

"Honestly, I think the easiest way to cope with things is just to simply just forget about them, kind of like erase it from your memory bank, because I have other patients I've got to take care of. So I think that's my best answer." – 25, Nurse





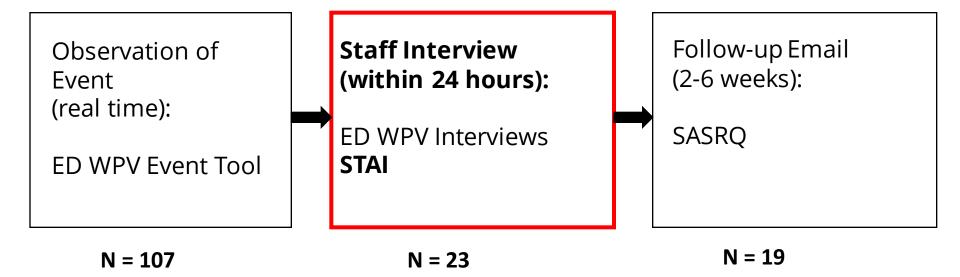
Impact on providers - burnout

"Does it make me think differently about my job? Yeah, it does, actually, it means I don't want to deal with this forever. I don't feel like this is okay. Our goal is to help people and it's just not happening, sometimes, and it makes me want to leave. And it wears you out and makes you burn out." – 24, Nurse





Outcomes: STAI







STAI: State-Trait Anxiety Inventory

- Frequently used to measure caregiver distress
- Scores range from 20 (least anxious) to 80 (extreme anxiety/distress)





STAI Results

Population	STAI score (IQR)
Random sample of ED staff (n=30)	31 (26-40)
Interviewees (n=23)	36 (28.5-40)





Outcomes: SASRQ

Observation of Event (real time):

ED WPV Event Tool

Staff Interview (within 24 hours):

ED WPV Interview Tool STAI

N = 107

N = 23

Follow-up (2-6 weeks):

SASRQ

N = 19







SASRQ: Stanford Acute Stress Response Questionnaire

- Measures stress after a traumatic event
- 30-items





SASRQ Results

 No participants identified as having an "acute stress response"





Outcomes: Summary

- Violence is grossly underreported
- Physical violence is relatively common
- Anxiety and stress levels were lower than expected
 - Self-selection? Conditioning?
- Interviews identified other potential outcomes
 - Apathy, anger, burnout





Next Steps: Building a Toolkit

- Education:
 - Inter-professional training
- Administrative support:
 - Round tables and walk-through with leadership
- On shift support:
 - Flexible breaks (post-event protected time)
 - Peer counselors for individual de-briefing





Questions?

Marie Vrablik, MD, MCR Elizabeth Rosenman, MD mavrab@uw.edu er24@uw.edu





