

# Impact of Behavioral Health Training to Public Health Assistant Working in an Acute Psychiatric Setting in Reducing Patient-Led Workplace Violence

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## Abstract

Workplace violence in healthcare settings is increasing worldwide. The risk of verbal and physical aggression towards healthcare workers is especially higher in psychiatry emergency settings. Public safety assistants are integral members of the psychiatry emergency department, who are frequently first responders to those with mental health issues. There is limited evidence discussing the patient-led workplace violence faced by public safety assistants. The purpose of this project is to explore the prevalence of physical and verbal patient-led violence faced by Public Safety Assistants (PSAs) working in psychiatry emergency settings and explore the impact of basic behavioral health education on PSAs in reducing patient-led workplace violence.

## Keywords

Workplace Violence, Education, Safety, Types of Violence, Emergency Department, Impact of Violence, Strategies, Healthcare Workers

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## 1. Statement of Purpose

The purpose of this project is to explore the prevalence of physical and verbal patient-led violence faced by Public Safety Assistants (PSAs) working in psychiatry emergency settings and explore the impact of basic behavioral health education on PSAs in reducing patient-led workplace violence.

## 2. Project Objectives

The objectives of this project were to review the literature related to workplace

violence in psychiatric emergency settings, explore the prevalence of physical and verbal patient-led violence faced by Public Safety Assistants (PSAs) working in psychiatry emergency settings, prepare evidence-based teaching material about common behavioral health conditions, provide in-class education to PSAs about common behavioral health conditions and explore the impact of basic behavioral health education in reducing patient-led workplace violence to PSAs.

### **3. Definition of Terms**

“Workplace Violence is any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site” [1]. “This violence ranges from threats and verbal abuse to physical assaults and even homicide. Workplace violence can affect and involve employees, clients, customers, and visitors” [1].

### **4. Theoretical Framework and Nursing’s Metaparadigm**

Understanding theories on violence may be useful to manage workplace violence with greater efficiency. Ramacciati, Ceccagnoli, Addey, Enrico, and Rasero (2018) discussed 24 different frameworks and theories related to workplace violence, which describe different intervention strategies. STAMPEDAR violence assessment framework, which can be a great resource to assess and manage workplace violence effectively. The acronym STAMPEDAR stands for staring and eye contact, tone and volume of voice, anxiety, mumbling, pacing, emotions, disease process, assertiveness, and resources. The nine components covered by this framework classify risk of violence and their corresponding cues, which may help healthcare workers, predict and prevent violent behaviors. The disease process is one of the nine components of the STAMPEDAR framework. Providing education about the mental health disease process will better prepare PSAs for de-escalating violent situations [2].

### **5. Literature Review**

Workplace violence towards Healthcare Workers (HCWs) is increasing worldwide [3]. Healthcare settings account for 75% of total workplace assaults [4]. Acts of violence and other injuries are currently the third-leading cause of fatal occupational injuries in the United States [1]. There is an especially high risk of aggression towards healthcare workers in psychiatric settings. Higher risk of verbal and physical aggression was found in patients with personality disorders [5].

The rate of workplace violence experienced by psychiatric aides is 69 times higher than the national rate [6]. D’Ettorre, Mazzotta, Pellicani, and Vullo (2018) reviewed 60 studies and found that schizophrenia, dementia, anxiety, suicidal ideation, acute stress reaction and alcohol and drug intoxication are main predictors of physical violence perpetrated by patients against healthcare workers in the emergency department [7]. Emergency physicians reported 97% of

workplace assaults were caused by patients. The top five types of physical assaults were hit or slap (44%), spit (30%), punch (28%), kick (27%), and scratch (17%) [8]. Baydin and Erenler (2014) reviewed several studies related to workplace violence in the emergency department, which shows undesired psychological effects of workplace violence such as reduced job satisfaction, post-traumatic stress disorder, super-alertness, bothersome memories and feelings of avoiding and futility. They also concluded that educational inadequacy, lack of preventive policies, unwillingness to report assaults and unmet expectations of patients and their family are the potential reasons for workplace violence [9]. The consequences of workplace violence include increased job dissatisfaction, diminished physical and emotional well-being, resignation from work, burnout and absenteeism [3] (*types of risk for healthcare workers-please let me know if you want to add more*).

Strategies to prevent workplace violence that have been proposed include multi-level educational programs and legislative policies to support and protect the rights of workers [3]. PSAs are frequently first responders to those with mental illness. There is limited evidence discussing the impact of workplace violence on PSAs or the training content required to effectively deal with the violent situations. The study setting (ECMC) does provide simulation based extensive de-escalation training to PSAs. However, PSAs get limited education about mental health conditions.

Workplace violence in the healthcare setting was identified as an emerging hazard for at least two decades [10]. Healthcare workers are now advocating for more serious legal consequences for patients attacking health workers [10]. New York is one of the states with laws designating penalties for assault of nurses. Thirteen percent of days away from work in the healthcare and social assistance settings were the result of violence in 2013 [11].

Four themes emerged from a literature review of 25 studies related to workplace violence towards nurses. These themes included 1) common settings where violence is experienced, 2) types of violence, 3) characteristics of perpetrators and 4) impact of workplace violence on nurses [3]. The highest rates for physical violence, sexual harassment, and horizontal abuse was found in the United States. The rates of psychological violence and bullying behavior among global violence situations were higher in Asia. The most common perpetrators of workplace violence include patients, Patients' families or friends of patients. The consequences of workplace violence include job dissatisfaction, reduced physical and emotional well-being, burnout, resignation from work and absenteeism [3]. Hospital employees are more prone to injuries than those in construction and manufacturing, which lead to missed days of work. Nine percent of hospital injuries are caused by violence and 48% of the injuries are caused by overexertion [12].

Healthcare settings account for 75% of total workplace assaults [4]. Acts of violence and other injuries are currently the third-leading cause of fatal occupa-

tional injuries in the United States [1]. The heavy workplace violence burden is carried by hospital settings, about three-quarters (75%) of workplace assaults occur in healthcare settings in the United States. Seventy-eight percent of emergency physicians have reported incidences of workplace violence in the twelve months period [13]. Total 5147 fatal workplace injuries were reported in the United States in 2017; 458 of these fatal workplace injuries reported in 2017 were intentional and caused by another person [1].

According to Wallace (2019), violent incidents are underreported. The definition of workplace violence and the individual perception of the violent situations might preclude reporting. Workplace violence occurs even when prevention strategies are in place and their injuries are not isolated to clinical staff members only [14]. These issues are found around the world, one of the studies done in Italy concluded that reduced experience of emotional violence from patients and visitors is associated with greater age and higher scores in secure attachment [15]. There is an especially high risk of aggression towards healthcare workers in psychiatric settings. Ridenour *et al.* (2015) evaluated risk factors contributing to patient aggression towards healthcare workers especially nursing staff in eight locked psychiatric units of the veterans' health administration throughout the United States. This study found that the overall rate for verbal aggression (60%) was higher than physical aggression (19%). The physical aggression rate was significantly higher in the evening shift (25%) as compared to the day shift (19%). Higher risk of verbal and physical aggression was found in patients with personality disorders [5].

Wax, Cartin, Craig, and Pinette (2019) reported 121 firearms-related casualties secondary to eighty-eight shootings occurred in eighty-six hospitals in the United States. The emergency department was the most frequent site involved for violent acts with mitigation and prevention strategies for hospital shootings being recommended [16]. In order of prevalence of workplace violence from most common to least common were verbal, physical, psychological, and horizontal violence with violence towards healthcare workers noted as a major issue for healthcare organizations, workers and patients. The predictors of physical violence perpetrated by patients against healthcare workers in emergency departments include patients with schizophrenia, dementia, acute stress reaction, substance use, suicidal ideation and anxiety [7].

Emergency physicians reported 97% of workplace assaults were caused by patients. The top five types of physical assaults were hit or slap (44%), spit (30%), punch (28%), kick (27%), and scratch (17%) [8]. Workplace violence impacts psychological and physiological well-being of healthcare workers. The consequences of workplace violence include increased job dissatisfaction, diminished physical and emotional well-being, resignation from work, burnout and absenteeism [3]. Physical and verbal violence in healthcare settings significantly impacts employee engagement and posttraumatic spectrum symptoms [17].

D'Ettre *et al.* (2018) reviewed 60 studies and found that schizophrenia, de-

mentia, anxiety, suicidal ideation, acute stress reaction and alcohol and drug intoxication are main predictors of physical violence perpetrated by patients against healthcare workers in the emergency department [7]. Baydin and Erenler (2014) reviewed several studies related to workplace violence in the emergency department, which shows undesired psychological effects of workplace violence such as reduced job satisfaction, post-traumatic stress disorder, super-alertness, bothersome memories and feelings of avoiding and futility [9]. The review by Baydin and Erenler (2014) also concluded that educational inadequacy, lack of preventive policies, unwillingness to report assaults and unmet expectations of patients and their family are the potential reasons for workplace violence [9].

Arnetz *et al.* (2020) conducted a survey on workplace bullying in a large hospital in the United States with 432 nurses responding to this survey. The survey findings show that prolonged exposure to workplace violence may lead to chronic stress, which may interfere with nurses' capacity to provide efficient care and focus fully on patient care tasks [18]. Emergency department physicians reported that workplace violence increases emotional trauma, reduces staff productivity and extends wait times [8]. Workplace violence impacts the mental and physical health of healthcare workers. Social and professional lives of healthcare workers are negatively affected by workplace violence, which ultimately impact patient care [19].

The findings from the explorative study done in Italian hospital suggest gender differences in the characteristics of workplace violence faced by healthcare workers from patients, visitors and patients' relatives. Female healthcare workers experienced verbal violence as compared to male healthcare workers. However, male healthcare workers experienced more physical violence than female healthcare workers [20].

The primary goal of the clinician is to figure out the underlying etiology of violent behavior through clinical assessment. Ongoing periodic evaluation is recommended after pharmacological or non-pharmacological interventions. "Non-pharmacological interventions should preferably precede pharmacological interventions in patients with aggressive and violent behaviors". It is essential to ensure security staff is available to screen violent patients for weapons and disarm the patients. Calm attitude and non-threatening approach to violent patients can help to control the situation. It is recommended to minimize physical restraints to a shorter duration while preparing for chemical restraints [21].

Strategies to prevent workplace violence that have been proposed include multi-level educational programs and legislative policies to support and protect the rights of workers [3]. A team-based standardized patient simulation may be effective to enhance teamwork in psychiatric emergency departments, which need to be considered to promote dual safety of staff and patients [22].

A team based structured simulation-enhanced interprofessional education intervention was found successful in improving teamwork and staff attitudes toward behavioral emergency care of violent patients [23].

Interprofessional simulation training on de-escalation techniques and restraint application can prepare healthcare staff to handle difficult patient encounters, which helps to improve staff perception of knowledge, abilities, skills, confidence, and preparedness [24].

The nurses working in the emergency department note a lack of resources, education and treatment required to provide safe and effective care for behavioral health patients [25]. Preliminary statistical analyses of post training data collection from 14 training courses concluded that mental health simulation training for police and ambulance personnel working with people experiencing behavioral health problems appears to improve their confidence, human factors skills and knowledge [26].

A pilot study done in Ontario Canada concluded that a brief mental health screener (interRAI Brief Mental Health Screener, BMHS) helps to assist police officers in identifying people with serious mental health disorders. The knowledge and use of this screener may help healthcare workers to identify patients with serious mental health disorders and de-escalate crisis situations in a better way [27]. The strategies suggested by Niu *et al.* (2019) to prevent workplace violence includes security measures, staff training to handle violence, providing a therapeutic environment, encouraging violence reporting and simplifying the reporting process [28]. A safe working environment for nurses and their patients can be promoted through incivility reduction programs, which provide the required tools to nurses to identify uncivil behaviors and react in a proactive, professional manner [29].

Education about the provisions of state law is the first and most important step in addressing workplace violence [13]. The security staff needs to be a more integrated part of the care team through active communication with patients and clinical staff to get a better sense of potentially violent situations and intervene before they escalate [12]. It was suggested to increase security to prevent workplace violence [13].

Four main themes emerged from a focus group study dealing with workplace violence in the emergency department such as being prepared, minimizing the risk of working alone, supportive management response and resolving the mismatch between service offered and the patient expectations [30]. The Omega education and training program in Canada has been used to teach necessary skills to mental health and healthcare workers to effectively intervene in situations of aggression. The Omega program was created in 1999 by the health and social services section of the agency for health and safety at work of the province of Quebec, Canada, it is based on the four core values of professionalism, respect, accountability, and security. The Omega program improves the attitudes, knowledge and skills of employees when dealing with physical and verbal aggression by patients. Omega training program has shown statistically significant improvements in psychological distress, levels of exposure to violence and confidence in coping [31].

A descriptive survey from 17 European countries found that physical restraint, seclusion and medications are the most commonly used interventions in the management of violent patients. The top priorities found for research and education include preventing violence, best practice in managing violence, impact of environment and staff on levels of violence, risk assessment and triggers for violence and aggression [32].

## 6. Research Gaps

Prevention of workplace violence is required to ensure a safe workplace and safer patient care [19]. There is limited evidence that de-escalation techniques training will improve healthcare worker's ability to de-escalate violent behavior and improve safety in practice [33]. Healthcare workers often felt isolated when managing workplace aggression and violence. A strong organizational commitment is imperative in reducing workplace violence. Clinical supervision and staff training in understanding violence and aggression is recommended [34].

The rate of workplace violence experienced by psychiatric aides is 69 times higher than the national rate of workplace violence experienced by other healthcare workers [6]. A retrospective case study by Lavelle *et al.* found that de-escalation is often effective in stopping a sequence of conflict in acute inpatient settings, but it may be challenging in patients with a history of violence [35]. PSAs are frequently first responders to those with mental illness. Appropriate training about mental health de-escalation techniques to hospital security personnel is an essential component in improving interactions between security officers and patients with mental illness. Current issues in training security personnel include training without proper outcome measures of effectiveness and the belief that a training provided on a single occasion is sufficient to improve interactions with individuals over the longer-term. Scenario-based training programs focusing primarily on increasing empathy, verbal and non-verbal communication and de-escalation strategies are recommended to reduce violence in the workplace that is often directed at healthcare workers [36].

Effective intervention such as mental health training for every healthcare worker including public safety associates is required to prevent short and long term physical and psychological consequences associated with workplace violence. There is limited evidence discussing the impact of workplace violence on PSAs or the training content required to effectively deal with the violent situations associated with mental health conditions in the emergency department. PSAs in acute psychiatric facilities often receive 1-day crisis intervention training and 2 days behavior health training upon hiring. However, these employees are looking for additional mental health training for better understanding of mental illnesses, which will help them to respond to mental health-related violent situations appropriately without compromising safety of themselves, their coworkers and patients. Multiple strategies based on "multidimensional" analysis of the operating ambiances and interventions are required to effectively control the issue of violence in the emergency department. Further research is required to identify

effective training content to promote a safe work environment in the emergency department [37].

## 7. Project Development Plan

A detailed project outline was created based on the extensive review of evidence-based literature. STAMPEDAR violence assessment theoretical framework was used to support and guide the development of this project. After permission was granted from The D'Youville College Institutional Review Board, evidence based teaching material about common behavioral health conditions leading to violence was prepared. A pre and post education survey about prevalence of patient-led workplace violence, their pre and post knowledge level about basic mental health conditions (Likert scale 1 - 10) and their pre and post education opinion about impact of education in reducing patient-led workplace violence was given to all public safety assistants (PSAs) working in comprehensive psychiatric emergency department after obtaining written informed consent. There was no monetary benefit to the participants. There was no potential harm for their participation. The data was analyzed using descriptive statistics.

## 8. Plan for the Protection of Human Subjects

Following defending the project successfully in front of the project committee, approval from the D'Youville College Institutional Review Board (**Appendix A**), removed for publication and support from CPEP director (**Appendix B**), removed for publication informed consent, removed for publication was obtained from PSAs willing to participate in research voluntarily. The project detail was provided in the informed consent. The participants were asked to sign the informed consent after reading the project details. The primary investigator further explained the project detail prior to obtaining informed consent during the teaching session and any questions related to the project were answered before obtaining consent to participate in the research. The participants were asked to fill out pre and post education surveys (**Appendix A** and **Appendix B**). The identifying characteristics were not collected to ensure confidentiality. The pre- and post-training survey was anonymous. The participation in the survey was voluntary and there were no potential harms for their participation. Survey results will be stored safely in the author's home for a period of 3 years and then the data will be destroyed.

## 9. Project Setting and Population

The intended project setting was the Comprehensive Psychiatric Emergency Department (CPEP) at ECMC, Buffalo, NY.

## 10. Participants

Public safety associate working in CPEP, ECMC, Buffalo, NY between various ages. Both male and female participants were included in this study.



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## 11. Design

The study design chosen for this research was pretest–posttest design. This study design will help to analyze pretest measure of the outcome of interest (reduction of patient-led workplace violence) prior to implementation of research intervention (behavioral health training) followed by a posttest including measure of same outcome of interest after implementation of research intervention.

## 12. Data Collection Methods

A detailed project outline was created based on the extensive review of evidence-based literature and the theoretical framework used to guide the project. A pre and post education survey about prevalence of patient-led workplace violence, their pre and post knowledge level about basic mental health conditions (Likert scale 1 - 10) and their pre and post education opinion about impact of education in reducing patient-led workplace violence was collected from Public Safety Assistants (PSAs) working in comprehensive psychiatric emergency department after obtaining written informed consent. There was no known harm for their participation. They could refuse to participate in research at any time.

## 13. Project Evaluation

After obtaining full approval from the D'Youville college institutional review board (**Appendix A**), the pre and post education survey findings were evaluated using descriptive statistics.

## 14. Results

Total of Nine PSAs participated in this pilot study ( $N = 9$ ). Most of the participants in this study were male from various age groups and varied work experience from less than 1 year to more than 10 years. 78% of participants reported daily encounters of patient-led verbal violence and 22% reported weekly encounters of patient-led verbal violence (**Appendix A**). Fifty-six percent of participants reported daily encounters of patient-led physical violence, 33% reported weekly encounters and 11% reported monthly encounters with patient-led physical violence (**Appendix B**). The mean of pre-test knowledge about mental health conditions was 5.6. The post-test average knowledge about mental health conditions was 8.0. The participants were able to identify more mental health conditions leading to patient-led violence after the teaching session. According to a post-test survey, education about common behavioral health education can help them to reduce patient-led physical violence to 71% and verbal violence to 78%.

## 15. Conclusion

Workplace violence is an occupational hazard for healthcare workers. Patient safety associates and unlicensed assistive personnel are often called upon to respond to episodes of patient violence in hospital settings. Providing basic mental health training in addition to de-escalation and safety techniques to these work-

ers can reduce violence and injuries.

## 16. Implications for Future Practice

This project highlighted the need for basic mental health training in reducing patient led workplace violence. It can help PSAs in identifying the most common mental health conditions leading to violent behavior, which can prepare them better in identifying triggers and intervening accordingly. The participants also verbalized the need for an annual review of education.

## 17. Future Recommendations

The purpose and intention of this project were to address the role of basic mental health education to PSAs working in psychiatric emergency settings in reducing patient-led workplace violence. The limitations of this study were the small sample size and limited female participants. Most of the PSAs working in psychiatric emergency settings are male. Further studies are needed to explore challenges experienced by female PSAs in psychiatric emergency settings. Many PSAs did not attend teaching sessions about basic mental health conditions. Future research should also focus on barriers to learning such as lack of motivation, lack of administrative support, or lack of incentives, etc.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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## Appendix A

### Behavior Health Education Pre-Test

(To be filled by PSAs working in comprehensive psychiatric emergency department).

- Sex: a. Male b. Female c. Other
- Years of clinical experience: \_\_\_\_\_
- Based on your experience of working in a psychiatric emergency department, how often do you experience verbal violence such as shouting and swearing from patients?  
a. Daily b. Weekly c. Monthly d. Never
- Based on your experience of working in a psychiatric emergency department, how often do you experience physical violence such as pushing and hitting from patients:  
a. Daily b. Weekly c. Monthly d. Never
- On a scale of 1 - 10 (1 is least and 10 is most) do you think your current annual behavioral health training is sufficient to help you deal with patient led:  
a) Physical violence? \_\_\_\_\_ b) Verbal violence? \_\_\_\_\_
- On a scale of 1 to 10 (1 is least and 10 is most) how would you rate your basic knowledge about common behavioral health conditions such as depression, schizophrenia, bipolar disorder, alcohol use disorder, substance use disorder, borderline personality disorder and psychosis, etc. \_\_\_\_\_
- Based on your current knowledge, which of the following behavior health conditions (depression, schizophrenia, bipolar disorder, alcohol use disorder, substance use disorder, borderline personality disorder and psychosis) do you feel most often trigger physical and verbal violence? List all that apply:

## Appendix B

### Behavior Health Education Post-Test

(To be filled out by PSAs working in psychiatric emergency department)

- Sex: a. Male b. Female c. Other
- Years of clinical experience: \_\_\_\_\_
- After completing the Behavioral Health Training Modules, how would you rate your basic knowledge about common behavioral health conditions such as depression, schizophrenia, bipolar disorder, alcohol use disorder, substance use disorder, borderline personality disorder and psychosis etc from the scale of 1 to 10 (1 is least and 10 is most).
- On a scale of 1 - 10 (1 is least and 10 is most) how much do you think the behavioral health training will help you deal with patient led:  
a) Physical violence? \_\_\_\_\_ b) Verbal violence? \_\_\_\_\_
- After completing the behavioral health training, please list the behaviors and health conditions you now feel can be triggers for physical and verbal violence? List all that apply.
- Any comments or suggestions for future training/education