

AN EDUCATIONAL PROGRAM TO INCREASE STAFF KNOWLEDGE AND
SKILLS IN THE THERAPEUTIC MANAGEMENT OF
VIOLENT BEHAVIORS BY PATIENTS

by

Eleanor Stacey Combs

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ABSTRACT

Work place violence (WPV) is an unfortunate fact of life for health care workers and has evolved into a serious health hazard among both in the United States, and worldwide. Health care workers, facilities, and patients themselves often suffer negative consequences, both physically and mentally, by experiencing or witnessing WPV. An educational intervention, consisting of a pre-test, PowerPoint® presentation, and a post-test, was conducted to increase health care workers' knowledge regarding the therapeutic management of WPV. The intervention group (N=18) consisted of a variety of the direct care employees of an adult inpatient psychiatric facility in a rural/frontier western state. The educational intervention and tests were based on the Centers for Disease Control, Workplace Violence Prevention for Nurses Program (Centers for Disease Control [CDC], 2014). Topics covered in the intervention included: definition of violence, types of violence, workplace violence consequences, and risk factors for violence, prevention strategies for health care workers, and intervention strategies. The goal was to compare the pre-test and post-test mean scores, in an effort to see if the educational intervention could significantly increase the participants' overall knowledge of WPV. Test data was analyzed using a dependent sample t-test of mean scores, as the same group completed both the pre-test and the post-test. Results indicated that the educational intervention significantly increased WPV knowledge of the participants. Future research would benefit from using a larger sample size and by conducting a long term project to identify if there was a correlation between the evidence-based WPV education and the overall reduced incidents and/or injuries related to WPV. Continued research is important as an effective system needs to be implemented to safely manage potentially dangerous situations while protecting health care workers.

CHAPTER 1

INTRODUCTION

Problem Statement

Violence against health care workers is a significant worldwide occupational health problem (Blando, O'Hagan, Casteel, Nocera, Peek-Asa, 2012; Flannery, LeVitre, Rego, & Walker, 2011). Additionally, the potential for violence negatively affects nurse performance and job satisfaction (Gates, Gillespie, & Succop, 2011; Hegney, Tuckett, Parker, & Eley, 2010). Nurses who experience aggression often tend to become more apathetic and less caring toward patients. This often leads to poor care and less overall patient satisfaction (Gates et al., 2011). Furthermore, employers may also be adversely affected by workplace violence (WPV) as a result of decreased employee productivity, higher staff turnover, increased workers' compensation claims, added legal liabilities, and potential fines by professional and regulatory organizations (Gillespie, Gates, Kowalenko, Bresler, & Succop, 2014).

Historically, many nurses do not report aggression in the workplace because they consider it as 'just part of the job' and do not believe reporting will yield a beneficial result (Blando, Ridenour, Hartley, & Casteel, 2014; Lanza & Campbell, 1991; Lion, Snyder, & Merrill, 1981). Underreporting also makes it difficult to accurately assess the frequency and causes of assaults, making it harder to plan, implement and evaluate

solutions (Gifford & Anderson, 2010; Centers for Disease Control and Prevention [CDC], 2014).

Statistics about workplace violence are often confusing and difficult to reconcile due to the different criteria and sampling methodologies used by the investigating agencies. Regardless of these differences, most studies show that health care workers, particularly nurses, are at a far higher risk of workplace violence when compared to most other professions (CDC, 2014).

Every health care worker has the potential to encounter WPV by either being a victim of an assault, or interacting with another co-worker who has been assaulted. It is important for health care workers to be effectively trained and educated in order to minimize the likelihood of becoming victims of assault in the workplace. A well-written and implemented workplace violence prevention program, combined with engineering controls, administrative controls and training can reduce the incidence of workplace violence in both the private sector and federal workplaces (Occupational Safety & Health Administration [OSHA], 2015a, p.5).

In relation to the organization where this project occurred, a policy on WPV prevention does not exist. This project could contribute to implementing organizational policy guidelines for all health care workers to optimize safety for both employees and patients.

A majority of states have criminal statutes specifically addressing assaults on emergency medical providers and 32 make it a felony to assault a health care worker or emergency medical personnel (Coble, 2016, “Statutory Protections for Medical

Professionals,” para.2). In addition, Coble also reports “7 states (California, Connecticut, Illinois, New Jersey, New York, Oregon, and Washington) require health care employers to implement WPV prevention programs (“An ounce of prevention,” para.1).

Unfortunately, in one rural/frontier state, there are currently no criminal statutes for assaulting health care workers. According to Bird (2016), “it’s a felony to attack a police dog, law enforcement officers or officials at sporting events, but health care workers don’t have the same protection” (para.4).

CHAPTER TWO

REVIEW OF THE LITERATURE

Definition of Key Terms

Assault: A violent physical or verbal attack or, an attack that threatens physical harm to a person whether or not actual harm is done (Merriam-Webster, 2016, para.1).

Mental Illness: Health conditions involving changes in thinking, emotion, or behavior (or combination of these). Mental Illness is also associated with distress and/or difficulties functioning in social, work, or other family activities (American Psychiatric Association [APA], 2015, “What is Mental Illness?” para.1).

Post-Traumatic Stress Disorder (PTSD): Develops from a response to an experienced or witnessed traumatic event, a perceived threat or actual death or serious injury that results in fear. Symptoms include flashbacks, nightmares, anger, anxiety, depression, impaired concentration, panic attacks, and an exaggerated startle response (Hood, 2011,” PTSD Prevalence,” para. 2).

Violence: For this project, violence is defined as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation” (World Health Organization [WHO], 2015, “Violence,” para.1).

Inclusion/Exclusion Criteria

Because of the large volume of information available regarding violence, inclusion and exclusion criteria were clearly necessary in order to identify content appropriate to this project. First, the dates of publication were within the previous 5 years spanning from 2010-2015 and, articles were limited to full text documents. This allowed for the most current literature to be reviewed and, to identify relevant information and pertinent gaps that may exist.

Next, peer-reviewed journals were used and primary sources of research were selected. And primary sources of research were selected. Secondary sources may fail to provided needed details about studies, are seldom entirely objective and not considered good sources on which to build an evidence base (Polit & Beck, 2011). Therefore secondary sources should be excluded from an integrative review (Polit & Beck, 2011).

Lastly, all articles were written in English. International results were also included in the literature search to ensure adequate representation of WPV.

Databases

The databases utilized were chosen in order to ensure sufficient results regarding WPV. A comprehensive review of the literature was completed using Cumulative Index of Nursing (CINAHL), Medical Literature Analysis and Retrieval System Online (MEDLINE), and Psychological Information Database (PsycINFO). The search terms included: 1) violence against health care workers, 2) violence against nurses, 3) safety in

the workplace, 4) workplace safety, 5) preventing injuries to employees, 6) assaults by patients, 7) assaults on health care workers, and 8) Callista Roy's Adaptation Theory. "Psychiatric settings" was also added to each term to further narrow down results. The search yielded 1390 results (Appendix A). Duplicates from different databases were eliminated, resulting in 348 scholarly, peer-reviewed articles with potential relevance to this topic. Reference lists of these articles were also searched for relevant material.

Type of Violence to be Addressed in this Educational Project

The California Occupational Safety and Health Administration developed a model that described four distinct types of workplace violence based on the perpetrator's relationship to the victim and/or place of employment. The four main types of workplace violence were classified as:

Type 1: Violence by a stranger with criminal intent

Type 2: Violence by a customer or client

Type 3: Violence by a co-worker

Type 4: Violence by someone in a personal relationship

(Lipscomb, 2014, p. 9).

The most common type of violence is Type 2; violence referred to as customer/client on worker. Only 3% of all workplace homicides result from this type of violence, but it accounts for the greatest majority of non-fatal workplace violence incidents (Business

and Legal Resources [BLR], 2011). Research shows that this type of violence occurs most frequently in emergency and psychiatric treatment settings, waiting rooms, and geriatric settings, but is by no means limited to these locations (CDC, 2014). As a result, customer/client violence on workers will be the key focus of this project. This project considers the customer/client relationship to include patients, their family members, and visitors.

Prevalence

Throughout the medical professions, customer/client violence on workers is widespread. From 1997 to 2009, there were 130 workplace homicides in the health care and social assistance industry within the private sector. According to the Bureau of Labor Statistics (BLS) (2013),

“more than 23,000 significant injuries were reported due to assaults at work, and more than 70 percent of these assaults were in health care and social service settings. Health care and social service workers are almost four times as likely to be injured as a result of violence as the average private sector worker (para. 1).”

Additionally, the Occupational Safety and Health Administration [OSHA] (2015b), report that nearly two million workers reported being victims of workplace violence each year.

The Liberty Mutual Research Institute for Safety (2011) lists workplace violence as the tenth-leading cause of non-fatal occupational injuries. Nationwide, between 2011 and 2013 for health care workers, assaults comprised 10-11% of workplace injuries involving days away from work, as compared to 3% of injuries of all private sector employees

(OSHA, 2015a, p. 2). Similarly, in one rural/frontier state, in 2013, the total number of nonfatal occupational injuries involving days away from work, caused by intentional injury by another person was 11.5% for nursing, psychiatric, and home health aides, versus only 2.6% among all other occupations (BLS, 2013).

Currently, workplace violence is the fourth leading cause of death in the workplace and the leading cause of death among women in the workplace (Monson, Scaglione, Allen, & Wilkes, 2011; Swan & Mitus, 2014). Health care workers are at high risk of violence all over the world (WHO, 2016).

Reports of violence are most frequent in psychiatric, geriatric, and emergency departments. Those working in a psychiatric setting were at a significantly greater risk of experiencing violence than any other area. According to the Bureau of Labor Statistics (as cited in OSHA, 2015c),

“psychiatric aides experienced the highest rate of violent injuries that resulted in days away from work, at approximately 590 injuries per 10,000 full-time employees. This rate is more than 10 times higher than the next group, nursing assistants, who experienced about 55 such injuries per 10,000 full-time employees (p. 3)”

Risk Factors for Workplace Violence

Health care workers are exposed to a large variety of factors that increase their risk for verbal and physical WPV from patients and visitors (Gillespie, Gates, Miller, & Howard, 2010). WPV varies from setting to setting depending on location, size, and type of care. Common risk factors in health care facilities include: “history of violence, psychotic disorders, drug and alcohol use, overcrowding, long waits for service, inadequate security

and staff training, poor environmental design, poorly lit areas, lacking visitor policies, and insufficient policies for preventing and managing crisis with unstable patients” (CDC, 2014, “Clinical Risk Factors,” para.7; OSHA, 2015b, “Who is at Risk of Workplace Violence?” para. 1). Also, “violence often takes place during high activity times, and while interacting with patients, such as meal times, visiting hours, medication times, and during patient transportation” (CDC, 2014). Additional contributors to WPV are “increasing numbers of weapons, use of hospitals by the law enforcement, increasing levels of mental disorders, releasing mentally ill patients without adequate follow-up, availability of drugs or money in facilities, distraught family members and friends, and lack of monitoring systems” (Stokowski, 2010, para.2). All of these risk factors may contribute to increased WPV in the health care profession. Factors associated with the levels of violence in psychiatric units are similar to factors that are associated with violence among individual patients and include lifetime history of violence, male gender, age, personality disorders, diagnosis of schizophrenia, social stressors, and substance abuse (Iozzino, Ferrari, Large, Neilssen, & Girolmo, 2015).

Workplace Violence Consequences

Effects on Patient Care

Violence has also been associated with: “disrupted unit operations, unanticipated changes in patient mix, disproportion numbers of patients awaiting placement, discrepancies between the nursing resources required from acuity measurement and those supplied, more tasks delayed, and increases in medication errors” (Roche, Diers, Duffield,

& Catling-Paull, 2010, "Findings" para.1). All of these factors can contribute to a detrimental patient experience.

Effects on Health Care Workers

Violence in the health care setting affects the employee, employer, and the patient. In addition to the physical injury, such as disability, chronic pain, and muscle tension, employees who experience violence also suffer psychological problems, such as loss of sleep, shock, nightmares and flashbacks (AbuAlRub & Al-Asmar, 2011; CDC, 2014; Gates et al., 2011). Health care workers who have been assaulted typically experience a multitude of both short-term and long term emotional reactions including: "anger, sadness, lowered self-esteem, frustration, anxiety, irritability, guilt, loss of confidence in ability, fear of criticism by co-workers and supervisors, apathy, emotional exhaustion, self-blame and helplessness" (Samir, Mohamed, Moustafa, & Saif, 2012, p. 202). Evidence shows that being subjected to physical and verbal abuse takes its toll in terms of psychological distress, and this may affect normal working and leisure lifestyles from months to years afterward (Scott, Ryan, James, & Mitchell, 2011). Cases of severe psychological trauma, left untreated, may also lead to depression, substance abuse, retaliatory violence, chronic illness, or even suicide (CDC, 2014).

PTSD is an occupational hazard for nursing. It is estimated that up to 14 percent of the overall general nursing population experience symptoms that meet the criteria to be diagnosed with PTSD, which is four times higher than the general adult population. (Hood, 2011," PTSD Prevalence," para.2).

Effects on Health Care Facilities

Staff shortages, increased patient morbidities, exposure to violent individuals, and the absence of strong workplace violence prevention programs and protective regulations are all barriers to eliminating violence against health care workers (CDC, 2014). The aggregate cost of WPV to United States employers is estimated to be more than \$36 billion (Reference for Business.com, 2011). The average cost of turnover for a bedside RN ranges from \$36,900 to \$57,300 resulting in the average hospital losing \$ 4.9 - \$7.6 million with each percent change in RN turnover either costing or saving the average hospital an additional \$379,500 (Nursing Solutions Inc., 2015).

WPV impacts include

“staff turnover, absenteeism, decreased productivity, medical care use, property damage, security costs, litigation, workers’ compensation costs, and decreased morale. Additionally, significant costs are incurred by facilities to hire and train replacement staff due to poor employee retention” (CDC, 2014, “Consequences for Healthcare Organizations,” p. 13; Gates et al., 2011, “Introduction,” para.3; Papa & Vercella, 2013, “Indirect Costs,” para.1).

Building an Effective Workplace Violence Prevention Program

In 2015, OSHA issued its most recent *Guidelines for Health Care and Social Service Workers*, and they offer an excellent framework for addressing the challenges of workplace violence prevention. OSHA's five major elements of an effective workplace violence prevention program are: 1) “management commitment and worker participation, 2) worksite analysis and hazard identification, 3) hazard prevention and control, 4) safety and health training, and 5) Recordkeeping and program evaluation” (OSHA, 2015a, p.5).

Management Commitment and Worker Participation

“Employers and employees are equally responsible for a successful workplace violence prevention program and, should be able to comprehend, share concerns, and demonstrate, safety and security guidelines. Employees should also participate in safety committees that address relevant issues” (CDC, 2014, “Prevention strategies,” para. 1).

Management commitment, including the endorsement and visible involvement of top management, provides the motivation and resources to deal effectively with workplace violence. According to (OSHA, 2015a, p. 6), management commitment should consist of:

- Demonstrating organizational concern for employee emotional and physical safety and health
 - Exhibiting equal commitment to the safety and health of workers and patients/clients
 - Assigning responsibility for the various aspects of the workplace violence prevention program to ensure that all managers, supervisors and employees understand their obligations
 - Allocating appropriate authority and resources to all responsible parties
 - Maintaining a system of accountability for involved managers, supervisors and employees
 - Establishing a comprehensive program of medical and psychological counseling and debriefing for employees experiencing or witnessing assaults and other violent incidents
 - Supporting and implementing appropriate recommendations from safety and health committees
- (p.6)

By working together, both the employer and the employee can help to ensure a successful workplace where WPV is minimized. A clear, concise, violence prevention policy will be in place, and the employees will have the tools, training, and support needed to effectively enact that plan.

Worksite Analysis and Hazard Identification

Worksite analysis involves mutual step-by-step assessment of the workplace to find existing or potential hazards that may lead to incidents of workplace violence. (OSHA, 2015a, p.8). For this process to be successful, it is vital that the employers and the employees work together to identify and assessing hazards. Effective training techniques may also be introduced if applicable, to abate the hazard. Additional important areas for analysis also include records review, job hazard analysis, employee surveys, and client-patient surveys.

Hazard Prevention and Control

This process occurs once a worksite analysis has been completed. The goal is to prevent or control identified hazards. Follow-up is then done to evaluate efficacy of the implemented controls and evaluate if the controls are being used and maintained properly and, evaluate efficacy (OSHA, 2015a, p. 12).

Engineering controls are physical changes that either remove the hazard from the workplace or create a barrier between the worker and the hazard that may include where appropriate:

- Using physical barriers (such as enclosures or guards) or door locks to reduce employee exposure to the hazard
 - Metal detectors
 - Panic buttons
 - Better or additional lighting
 - More accessible exits (where appropriate)
 - Closed circuit video
 - Bulletproof glass
- (OSHA, 2015a, p.13).

Administrative controls are those that affect the way staff performs duties. These controls may be utilized when appropriate to reduce violence. Additional components to effective WPV prevention are post incident procedures, services, and investigation.

Safety and Health Training

OSHA (2015a, p. 25), states that:

“training for all workers has a number of important benefits that include: 1) helping raise the overall safety and health knowledge across the workforce; 2) provide employees with the tools needed to identify workplace safety and security hazards, and 3) address potential problems before they arise and, ultimately, 4) reduce the likelihood of workers being assaulted” (p.24).

Continuing education helps ensure that health care workers are aware of potential health hazards and know how to optimize safety. Such training can be part of a broader type of instruction that includes protecting patients and clients by methods such as de-escalation techniques. In high-risk settings and institutions, refresher training may be needed more frequently, perhaps monthly or quarterly, to effectively reach and inform all workers (OSHA, 2015a, p. 25).

Every worker should understand the concept of “universal precautions for violence”. Violence should be anticipated but can be avoided or mitigated through preparation (OSHA, 2015a, p.25). Equally important, workers should understand the importance of a culture of respect, dignity, and active mutual engagement in preventing workplace violence.

It is the responsibility of the employer to teach the employee how to adequately deal with potentially violent situations with an effective plan of action, and a highly trained

and educated staff. A combination of training programs may be used, depending on the severity of the risk. In general, training should cover the policies and procedures for a facility as well as de-escalation and self-defense techniques. Both de-escalation and self-defense training should include a hands on component. Pertinent safety related topics to cover include the following according to (OSHA, 2015a, p.26) and consist of:

- The organization's violence prevention policy
- Risk factors that cause or contribute to assaults
- The location, operation, and coverage of safety devices such as alarm systems, along with the required maintenance schedules and procedures
- Policies and procedures for documenting patients' or clients' change in behavior
- Early recognition of escalating behavior or recognition of warning signs or situations that may lead to assaults
- Ways to recognize, prevent or diffuse volatile situations or aggressive behavior, manage anger and appropriately use medications
- Ways to deal with hostile people other than patients and clients, such as relatives and visitors
- Proper use of safe rooms—areas where staff can find shelter from a violent incident
- A standard response action plan for violent situations, including the availability of assistance, response to alarm systems and communication procedures
- Self-defense procedures where appropriate
- Progressive behavior control methods and when and how to apply restraints properly and safety when necessary
- Ways to protect oneself and coworkers, including use of the "buddy system"
- Policies and procedures for reporting and recordkeeping
- Policies and procedures for obtaining medical care, trauma informed care, counseling, and workers' compensation or legal assistance after a violent episode or injury

Additionally, workers who may face safety and security hazards should receive formal instruction on any specific or potential hazards associated with the unit, job and/or the facility. Such training may include information on the types of injuries or problems identified in the facility and the methods to control the specific hazards. It may also

include instructions to limit physical interventions in workplace altercations whenever possible. Other training topics may include management of assaultive behavior, professional/police assault-response training, or personal safety training on how to prevent and avoid assaults (OSHA, 2015a, p.25).

Recordkeeping and Program Evaluation

Recordkeeping and evaluation of a violence prevention program are necessary to determine overall effectiveness and to identify any deficiencies or changes that should be made (OSHA, 2015a, p.29). A key component of recordkeeping is that WPV incidents are reported. In many cases, victims do not report the assault. This underreporting, in turn, misrepresents the actual number of incidents that occur. As a result, proper investigations do not follow, the assailant is not prosecuted, and the victim feels disgruntled with the way the incident has been handled and suffers from the consequences (Horn & Dubbin, 2013; Virtanen et al., 2011). Some reasons that have been given why employees do not report WPV include: “1) lack of reporting mechanisms, 2) embarrassment, 3) blame, and 4) fear of retaliation (Gifford & Anderson, 2010; Roche, Diers, Duffield, & Catling-Paull, 2010, p. 15).”

Nurses will sometimes excuse acts of violence if they consider them to be 'unintentional' such as when they are committed by someone who is heavily medicated or cognitively impaired. Psychologically, it may be easier to excuse unintended physical or verbal assault, but failing to report such incidents can hinder workplace violence prevention efforts and lead to additional future incidents (Hoff & Slatin, 2006).

According to OSHA (2015a, p.29), additional processes in program evaluation include:

- Establishing a uniform violence reporting system and regular review of reports
- Reviewing reports and minutes from staff meetings on safety and security issues
- Analyzing trends and rates in illnesses, injuries, or fatalities caused by violence relative to initial or “baseline” rates
- Measuring improvement based on lowering frequency and severity of workplace violence
- Keeping up-to-date records of administrative and work practice changes to prevent workplace violence to evaluate how well they work
- Surveying workers before and after making job or worksite changes or installing security measures or new systems to determine their effectiveness
- Tracking recommendations through to completion
- Keeping abreast of new strategies available to prevent and respond to violence in the healthcare and social service fields as they develop
- Surveying workers periodically to learn if they experience hostile situations in performing their jobs
- Complying with OSHA and state requirements for recording and reporting injuries, illnesses, and fatalities; and
- Requesting periodic law enforcement or outside consultant review of the worksite for recommendations on improving worker safety

In a 2011 Emergency Nurses Association (ENA) study on workplace violence, hospitals with mandatory reporting policies experienced half the rate of physical violence as hospitals without reporting policies. The Veteran’s Health Administration has successfully reduced assaults in its hospitals by electronically flagging high-risk offenders, such as people who have been abusing drugs and those with a history of attacks on caregivers, who are then treated with extra precautions (Jacobson, 2014).

Theoretical Framework

The conceptual framework chosen for this project is Sister Callista Roy's Theory of Adaptation first published in 1970. She was inspired by the resiliency and coping ability of the children undergoing medical treatment (Phillips, 2010). The Roy Adaptation model presents the person as a whole adaptive system in constant interaction with the internal and external environment, and the main task of the human system is to maintain integrity in the face of environmental stimuli (Phillips, 2010).

According to Roy and Zahn (2006), the major premises of the theory are:

“people are viewed as holistic adaptive systems, with coping processes acting to maintain adaptation and to promote personal and environmental transformations, adaptive responses to support health, which is the process of being and becoming integrated and whole” (p. 270).

Witnessing or being a victim of WPV can significantly impact a person's life.

Healthcare workers clarify:

“that emotional and physical sequelae following their exposure to violence affects their abilities both personally and professionally, to carry out their responsibilities and include impaired thinking, a heightened sense of awareness, hypervigilance, and difficulty concentrating on tasks” (Stevenson, Jack, O'Mara & LeGris, 2015, “Perceived effects of violence on nurses” para.1).

Coping processes included in the Roy Adaptation Model include both innate coping mechanisms and acquired coping mechanisms. Innate coping processes are genetically determined or common to the species; they are generally viewed as automatic. In contrast, acquired coping processes are learned or developed through customary responses (Roy, 2009, p. 41). By being knowledgeable regarding evidence-based violence prevention, health care workers will be better prepared to recognize and appraise

a potentially violent situation. Health care workers can then identify and utilize adaptive coping responses appropriate to the situation providing for the best possible outcome.

Coping processes are further categorized as the regulator and cognator subsystems as they apply to individuals, and the stabilizer and innovator subsystems as applied to groups. Roy (2009), stated that “ the regulator subsystem responds through neural, chemical, and endocrine coping channels through the senses to the nervous system automatically producing an automatic unconscious response” (p. 41). The cognator system also responds by perceptual and information processing, learning, judgement and emotion. Defenses are used to seek relief from anxiety and make effective appraisal and attachments through emotions (p. 41). These processes whether integrated, compensatory, or compromised, are manifested in the behaviors of the individual or group.

The innovator subsystem involves processes for change and growth and these processes lie within group members and how the group stimulates the human potential of the members (Roy, 2009, p. 478). Role function effectiveness of the group depends on group problem-solving and decision- making skills (Roy, 2009, p. 478). The goal is to change the response to the environment by teaching more effective interventions to deal with WPV in order to, “change to a higher level of potential” (Roy, 2009, p.43). Health care workers who are knowledgeable and skilled in how to effectively manage a potentially violent occurrence, will be able to process the situation, use the tools learned in the educational intervention, and utilize their best judgement to safely address WPV.

Behavior is considered the “output” and is either adaptive or inadapative. These responses serve as feedback to the system, with the human system using this information to decide its efforts to cope with the stimuli (Roy, 2009, p. 34). These behaviors can be observed in four adaptive modes:

- Physiologic- Basic needs include oxygenation, nutrition, elimination, activity and rest, and protection. The underlying need for the physiologic mode is integrity (p. 43). Healthcare workers have a right to be safe in the workplace and should attend personal safety training programs to learn how to avoid and diffuse violent situations (Workplace Fairness, n.d., “What can I do to protect myself” para.3).
- Self-concept- Includes physical self, body sensation, body image, and personal self. The basic need underlying the self –concept mode is psychic and spiritual integrity (Roy, 2009, p. 44). Health care workers must have a personal interest in safety leadership- a value of personal motivation, a feeling of well-being to stay safe and, partnership in safety is grounded in healthy self-esteem (Muller, 2014, p. 5).
- Role function- Focuses on roles of a person in society and within a group. The basic need underlying the role function mode is social integrity- the need to know who one is in relation to others so that one will know how to act (p. 44). Health care workers with improved education, debriefing following an incident, and a supportive work environment, can use a variety of strategies to maintain personal safety to prevent, and manage patient violence (Stevenson et. al., 2015, “Results” para.1).
- Interdependence- Focuses on interactions related to the giving and receiving of love, respect, and value. The basic need of this mode is relational value or the feeling of security in nurturing relationships. Thus it follows that two specific relationships are the focus within this mode for the individual: significant others and support systems. For the group, this mode relates to the social context in which the group operates; important factors in this case include infrastructure and member capability (Roy, 2009, p. 45). According to Neese (2015), “promoting effective communication in healthcare is demanding and complex and, if health care workers are to meet the challenges of healthcare, they need to be supported by high quality, evidence-based training” (“Developing Critical Communication Skills” para.1).

Health care workers that have been assaulted may experience loss of confidence, independence, and even the inability to function in both the workplace and personal life.

This loss of control can cause a variety of emotions; such as anger, depression, extreme anxiety, and hopelessness. Benefits from education and training programs help health care workers develop skills and increase confidence in managing these situations (Fulde & Priesz, 2011, “Prevention” para. 2).

In the Roy Adaptation Model, stimuli from the environment is classified as focal, contextual, or residual:

- Focal stimulus- internal or external stimulus that is the most immediately in the awareness of the individual or group- the object or event most present in the consciousness (p. 35). WPV is the focal stimulus and the purpose of the educational intervention. The goal for health care workers in this intervention is to become knowledgeable to manage the stimulus.
- Contextual stimulus- all the other stimuli present in the situation that contributes to the effect of the focal stimulus. That is, contextual stimuli are all the environmental factors that present to the human adaptive system from within or outside but which are not the center of attention or energy (p. 35). In addition, these factors may influence how the focal stimulus is dealt with.
Violent patients are the contextual stimulus and the educational intervention knowledge will influence how health care workers deal with the focal stimulus.
- Residual stimulus- Environmental factors within or outside human systems, the effects of which are unclear in the situation. The effects of these stimuli may be unclear if there is no awareness on the part of the patient that a stimulus is an influence, or it may not be clear to the observer that these stimuli are having an influence on the human system (p. 36).

Health care workers, through the educational intervention, will become more aware of their surroundings, and become more proficient at managing the effects of WPV. This could allow for health care workers to respond more positively to an ever-changing environment. “One indicator of how a person is managing to cope with, or adapt to, changes in health status is their behavior” (Andrews & Roy, 1986, p. 6). When a person’s

reaction in a given situation can be identified and predicted, proactive measures can be instituted to manage unsafe behaviors before they occur.

It is important to observe an individual's adaptation level to determine an appropriate course of treatment and response to treatment. Nursing fulfills a unique role by being a facilitator of adaptation and by assessing behavior in the four adaptive modes. (Phillips, 2010). Nursing interventions have a purpose of strengthening adaptation and changing ineffective behavior into adaptive behavior (Phillips, 2010).

According to Roy (1986b), intervention involves the selection and implementation of approaches and is based directly on the view of the person as an adaptive system (p.91). The health care workers ability to respond positively to a change taking place depends on: 1) the degree of change taking place (focal stimulus), and 2) the state of the person dealing with the change (adaptation level) (Roy, 1986, p.91). Health care workers that successfully utilize effective interventions learned from the educational intervention, are then able to utilize coping mechanisms to respond positively and enhance safety in the workplace.

Purpose Statement

The purpose of this project is to develop an educational program regarding the personal safety of health care workers, involved in direct care with patients, at an inpatient psychiatric facility in one rural/frontier western state. Health care workers that have the tools, resources, and skills, to safely care for patients, decrease the likelihood of them becoming a victim of workplace violence.

PICOT Question

Would healthcare workers who have been educated regarding evidence-based workplace violence prevention compared to those who have not been educated, be less likely to suffer an injury when experiencing violence in the workplace?

Goal

The goal of this project is to develop an educational program that significantly increases health care workers' knowledge regarding the therapeutic management of workplace violence. Through knowledge gained from the educational program, the health care employees should recognize early signs, as well as tools to effectively deal with violence. The expected overall goal of this project is to increase the participants' knowledge regarding WPV by 20%, as measured by comparing pre-intervention (M1) and post-intervention (M2), test means. If $M2/M1 \geq 1.2$ our goal of at least a 20% increase will be met. The expected time frame for goal attainment is by the end of the educational project presentation, August 1, 2016.

Objectives

Participants should be able to clearly define workplace violence. Participants should be able to identify risk factors, consequences, and effects of WPV on facilities, employees, and patient care. Lastly, participants will be able to verbalize interventions that improve personal safety as well as safety for co-workers and patients.

Significance of the Project

OSHA (2015b), stated that “nearly two million workers report being victims of workplace violence each year” (“Who is at risk of workplace violence?” para.1). This project is significant in that it can serve to provide valuable information regarding the improvements that are needed in existing workplace violence prevention programs or, in many cases, where there are non-existent workplace violence education programs.

As stated earlier, those working in a psychiatric setting were at a significantly higher risk of experiencing the highest rate of violent injuries that resulted in days away from work, at approximately 590 injuries per 10,000 full-time employees. Information found, through an extensive review of the literature, can be used to develop improve workplace violence prevention programs with the intended results being overall cost savings for employers.

According to Seckan (2013), “the cost of job injuries and illnesses is enormous and estimated at \$250-\$300 billion dollars a year” (“Key Findings” para.1). The latest statistics estimate 500,000 employees and 1,175,100 lost workdays each year due to violence in the workplace. Lost wages are estimated at \$55 million annually (DeCastro, n.d.). In the United States nursing, psychiatric, and home health aides missed 54,860 days of work as a result of non-fatal occupational injuries and illnesses (BLS, 2014, “Profile Data”). Financial costs include losses to the institution as a result of medical expenditures, time away from the job, psychological counseling, and workers’ compensation claims. The cost to the individual extends beyond the immediate physical injury to possible anger, fear, anxiety, self-blame and loss of confidence (BLS, 2013).

The projected effect of this educational program is to increase health care worker knowledge regarding WPV and, decrease injuries to health care workers.

CHAPTER THREE

METHODS

Proposed Project Design

Educational programs allow health care workers to gain knowledge about WPV including how to prevent, assess, and respond to violent incidents. Other positive results may include increased attitudes in reporting WPV and confidence to intervene to prevent violence. Educational programs can help better protect health care workers from WPV and, also provides valuable tools for preventing, intervening, and reporting incidents (National Institute for Occupational Safety and Health [NIOSH], 2015).

Roy's adaptation model also provides applicable guidance for this project as a six-step systematic nursing process is used:

- Assessing behaviors manifested from the four adaptive modes (physiologic, self-concept, role function, and interdependence)
- Assessing and categorizing the stimuli for those behaviors
- Making a nursing diagnosis based on the person's adaptive state
- Setting goals to promote adaptation
- Improve interventions aimed at managing stimuli to promote adaptation
- Evaluating achievement of adaptive goals
(Phillips, 2010, p.62).

Understanding that WPV exists within the inpatient psychiatric health care setting, the next task was to develop a program to expand on knowledge already received in the orientation process and annual training regarding health care violence (Appendix A). The educational intervention embodies the principles of Roy's adaptation model by teaching the participants to better assess and manage the stimuli around them, and then adapting

their reactions to effectively manage/contain the situation. This is the key component to dealing with WPV, from the intervention.

The aim was to increase overall knowledge and awareness in an effort to assist the staff to anticipate and better manage the violence against health care workers. The learning objectives for this educational program included:

- Recognize behavioral warning signs of violence in individuals
- Employ communication and teamwork skills to help manage violence
- Identify techniques to minimize the likelihood of exposure to violent situations

The hypothesis was that the WPV knowledge of the group should significantly increase after the WPV educational intervention. The null hypothesis is that there will be no change.

This project used a combination of styles including didactic, where the active teacher is presenting information to the students in a face to face format, and dialectic, where the question and response portion drives the student and teacher to have a better understanding of the key concepts (Kern, 2012). The total allocated time for the educational program was one and a half hours, included the pre-test, the educational program, the post-test and the evaluation of the presented material.

Staff development contributed greatly to the project by assisting with making time available that the project could be offered. Once permission to proceed with the project was given by senior management, staff development provided scheduling, advertising, and facilities to present the educational intervention. Additionally, logistics were considered regarding an applicable training session time to cover the most participants

possible. The intervention was conducted in intervals, as the patient care units were already experiencing shortages of staff.

Protection of Participants

The Institutional Review Board (IRB) at Montana State University approved this project in April, 2016 (Appendix D). The project was considered to be exempt from a full IRB review because it did not identify the participants in any way. Information was not recorded in a manner that could ever place participants at risk of liability, financial hardship, employability, or reputation.

Additionally, the senior management team at the facility reviewed the project and approval was received from them in April of 2016. A change in senior management members required re-approval and, after determining no hardship would be afforded to the facility or participants, permission was obtained to conduct the project in June, 2016 (Appendix C).

It is essential to limit the information collected to only the data necessary to accomplish the task. Maintaining the privacy and confidentiality of the participants helps to protect the participants from potential harms including psychosocial harm such as embarrassment or distress; social harms such as loss of employment or damage to one's financial standing; and criminal or civil liability. Especially in social/ behavioral research, the primary risk to subjects is often an invasion of privacy or a breach of confidentiality (University of California Irvine [UCI], 2015).

Specifically, to this project, the only identifiable harm to the participants was the potential for ridicule or embarrassment if a particularly low score were shared, observed,

or correlated to a specific individual. To manage this potential harm, all tests were graded away from the participants, and scores were not shared or identified by a participant. Both the pre-test and post-test results were collected anonymously and will be administered and scored solely by educational program presenter. Tests were destroyed as soon as scoring was completed and data entry had been validated. There is no chance of matching the scores to an individual, as no personal information is logged on the tests or the evaluation.

Sample

For this educational program, the target audience was identified as employees that were considered “direct care” employees, including dietary workers, housekeepers, licensed independent practitioners, licensed practical nurses, psychiatric technicians, psychologists, and registered nurses. An educational program was chosen because many health care professionals entering the profession, as well as many experienced health care professionals, have not received training in workplace violence prevention strategies (Child & Mentes, 2010).

G-Power software was used to determine an appropriate sample size needed for this project. A one tailed t-test was chosen as an appropriate statistical analysis, as this would give us more power to detect an effect, based on an educational intervention (Idre, 2016). It was deemed unlikely that the average mean scores would go down after the intervention. Most scientists are usually satisfied with the statistical power of 0.8 or higher, meaning an 80% chance of determining a real effect (statisticsdonewrong, n.d.).

For this study, a confidence level of 90% was chosen, to be 90% sure a true change from the intervention was detected. Gravetter and Wallnau (2014), tell us that:

“ Alpha levels of .05, .01, and .001 are considered reasonably good values because they provide a low risk of error (of Type I or Type II errors) without placing excessive demands on the research results” (p. 216).

Consequently, an alpha level of 0.05 was chosen for this project, as it is the most widely used and accepted significance level used, providing for a margin of error only 1 in 20 (Taylor, 2014).

Using the G-Power priori analysis, it was determined that a sample size of at least 36 participants will be needed to adequately represent the project. Using a small effect size of 0.02, G-Power determined a sample size of 215 subjects would be needed. A large effect size of 0.08 suggests a sample size of 15. The sample size of 215 participants is unrealistic given the time constraints of project. The sample size of 15 may not accurately detect significant changes. Therefore, an effect size of 0.05 was selected for this project. According to a leading authority on Power Analysis, Cohen (1988), this 0.05 effect size will provide a medium effect size index for a t-test on means (p. 99). Consequently, the medium effect sample size was selected, $n = 36$, to provide sufficient data and valid findings (Appendix F).

Setting

This project will take place in an adult inpatient psychiatric facility in a rural/frontier western state. The facility, consisting of about 375 employees, averages approximately 700 admissions per year, and has a bed capacity of 174 acute licensed beds, with 35

mental health group home beds throughout nine separate treatment units (G. Watkins, personal communication, August 28, 2015).

Patients, aged 18 and older, are admitted to this facility for both acute and chronic mental health illness (es). In addition, patients may have personality disorders, maladaptive behaviors, and co-occurring chemical dependency issues. Several patients also have acute and/or long term physical and dental related co-morbidities requiring extensive medical and nursing care in addition to mental health treatment (S. Palmieri, personal communication, February 18, 2015). Civilly committed patients are patients who are deemed to be a danger to themselves, to others, or those who are gravely disabled due to suspected or known serious mental illness. Forensic patients are those placed on a forensic commitment. They are suspected or determined to have a serious mental illness and are involved with the criminal justice system at all stages including arrest, conviction, sentencing, and post sentencing. The average length of stay in the facility is 98 days for a civilly committed patient, and 714 days for a forensically committed patient (G. Watkins, personal communication, August 28, 2015).

Intervention

A PowerPoint ® presentation, based on the Centers for Disease Control Workplace Violence Prevention for Nurses (CDC, 2014) was developed to present the material (Appendix G). Topics covered included:

- Definition of violence
- Types of violence
- Workplace violence consequences
- Risk factors for violence

- Prevention strategies for health care workers
- Intervention strategies

These topics were chosen for this educational program because, often, both new and experienced health care workers are not formally nor effectively trained regarding WPV strategies. This type of training can benefit anyone employed in the health care industry (NIOSH, 2015).

The educational program will be held in the staff development training classroom at the inpatient facility during the summer of 2016. The program will be presented at two separate lunchtime settings, allowing all various department disciplines on all of the shifts the opportunity to attend. The program will be presented as an employee training and the employee, in turn, received in-service credit towards the total required yearly training.

Instruments Used to Gather the Data

The questions utilized for the pre/post-test were taken from the Center for Disease Control's *Workplace Violence Prevention for Nurses* training and education course (CDC, 2014). The original test consisted of seventeen multiple choice and seven true/false questions. The senior management team objected to one of the multiple choice questions and, as a condition of project approval, the question was removed from pre/post-test.

A program evaluation form was also provided to the participants at the end of the educational presentation. The evaluation consisted of three Likert scale questions ranging from one (strongly disagree) to five (strongly agree) and three fill in the blank questions inquiring if the participants had personally dealt with WPV and if so, how many times in

the previous three months. The Likert scale was the selected format as it is the most popular scale format utilized in surveys (Polit & Beck, 2008).

Data Collection

A 23 question (16 multiple choice questions and seven true/false questions) pre/post-test was administered to the participants at the beginning of the session (Appendix H/Appendix I). The standardized test questions were directly taken from the CDC Workplace Violence Prevention for Nurses training and education course (CDC, 2014). CDC information that is created by or for the U.S. government is within the public domain and may be freely distributed and copied. Per CDC request, appropriate acknowledgement is given in this scholarly project. The final step was the completion of a Likert scale program evaluation form, requesting feedback related to the presentation, the test, and the instructor (Appendix J). For the numbered responses, participants were asked questions: a) whether the WPV module was informative and enhanced their knowledge, b) if the test reflected the material presented in the educational session, and c) if the instructor was knowledgeable on the topic. Each participant rated the questions on a scale of one (strongly disagree) to five (strongly agree), and were encouraged to provide written feedback, both positive and negative, on the form.

How the Data Will Be Analyzed

A dependent T-test was performed as the pre-test and post-test data was collected on the same group. “The dependent t-test (also called the paired t-test or paired-samples t-

test) compares the means of two related groups to detect whether there are any statistically significant differences between these means” (Laerd.com, 2013). The same group could be compared in this project because each subject has been measured on two occasions on the same dependent variable (the educational intervention). The overall change in the two means will occur as the groups are being sampled at two different times. The baseline data from the pre-test will be compared to the post-intervention test data. The purpose of this analysis was to determine if the intervention significantly increased the knowledge of WPV in the test group.

The expected overall goal of this project was to increase the participants’ knowledge regarding WPV by 20%, as measured by comparing pre-intervention (M1) and post-intervention (M2), test means. This figure, $M2/M1$, was $19.83/15.94=1.24$. As stated previously, this value is greater than the original goal of 1.2, so the 20% increase was met. The participants in the intervention experienced a 24% increase in knowledge of WPV, as compared by the pre/post-test means.

CHAPTER FOUR

OUTCOMES

Brief Overview

The purpose of this project was to determine whether an educational intervention would significantly increase health care workers knowledge regarding WPV. This intervention would be following an educational intervention learned in the orientation process and previous facility annual training. The project was conducted between July, 2016 and August, 2016.

Summary of Findings

This intervention involved collecting information about patient's behavior. Through skills learned in the educational intervention, the health care worker could gather information in the four adaptive modes (physiological, self-concept, role function, and interdependence) and determine the behavior to be adaptive or ineffective (Andrews & Roy, 1986, p.61).

Outcomes of the educational program designed to increase staff knowledge in the therapeutic management of violent behaviors by patients can be separated into objective and subjective findings. Objective findings included the pre/post-test scores, and the data collected on the evaluation forms. Subjective findings included verbal comments to the instructor after the presentation, feedback from the Staff Development Department,

and discussions among the health care workers about the educational program. The following will describe the objective and subjective findings in further detail.

Objective Findings

There were a total of 18 (n=18) participants who answered 23 questions on the pre-test and 23 questions on the post-test. One question was eliminated from the data collected at the direction of the facility on both the pre-test and the post-test. Therefore, this question was deleted in the analysis. The question removed at the request of the facility was regarding OSHA's General Duty Clause, created in 1970, that stated: "employers are required to provide their employees with a place of employment that "is free from recognizable hazards that are causing or likely to cause death or serious harm to employees" (OSHA, 2014, "Enforcement," para.1). Members of the senior management team at the facility opined that including this content in the educational program could be misinterpreted by the participants. In addition, the team determined that the question be removed before granting permission for this researcher to present the educational program. Tests were scored by the total number of questions answered correctly out of the 23 questions (24 original questions minus the one deleted question). Pre-test scores, answered correctly, ranged from 12 to 20, and post-test scores answered correctly, ranged from 16 to 23 (see Table 1).

Test Data

Table 1.

<i>Test Data</i>																			
																			Mean (X)
Pre-Test Score	16	17	17	20	14	15	18	15	16	14	12	16	16	18	15	14	16	18	15.9444
Post-Test Score	23	22	21	17	20	18	19	20	21	21	19	20	19	21	16	23	17	20	19.8333
N=18																			

From this data, a paired/dependent t-test was used to determine whether the change in knowledge gained from the educational intervention was statistically significant in increasing the overall knowledge of WPV in the test group. The major advantage of running a within-subject repeated-measures design is that between-groups variation will be eliminated from the equation where each individual is unique and reacted slightly differently than someone else, thereby increasing the power of the test (Laerd.com, 2013). The hypothesis was that the WPV knowledge of the group should significantly increase after the WPV educational intervention. The null hypothesis is that there will be no change. Results indicated significant differences ($p = 0.0000254$) were found between the mean scores on the pre-test ($X = 15.94$ correct) and the post-test ($X = 19.83$ correct) (see Table 2).

Dependent Samples t-Test of Mean Scores
Table 2.

<i>Dependent Samples t-Test of Mean Scores</i>			
	<i>X</i>	<i>t</i>	<i>p</i>
Pre-test	15.94	-5.71	0.0000254
Post-test	19.83		

The p-value ($p = 0.0000254$) was lower than the 0.05 alpha level, indicating a statistically significant difference in the mean scores between the groups.

Calculating the overall effect size, using Cohen's d_z formula calculated directly from the t-value and the number of participants, provided by Rosenthal (1991) (see Table 3), determined that the effect size of the study is large ($d = 1.35$), as it is greater than .8 (Cohen, 1988). Essentially, for the one group of participants, pre-intervention and post-intervention mean scores differed by 1.35 deviations, a substantial finding.

Cohen's $d_z = t/\sqrt{n}$
Table 3.

Cohen's $d_z = t/\sqrt{n}$	
n	18
t	-5.71
Cohen's d_z	-1.34586

After the post-tests were completed, data was collected from the evaluation form. In total, all eighteen participants completed the evaluations. The average scores for each question with a sample of comments are included in the table (see table 4).

Program Evaluation Form Summary
Table 4.

Program Evaluation Form Summary			
Question #	n	Average Score	Sample Comments
1	18	4.5	"I liked the handout."
2	18	4.8	"The information was clear and concise."
3	18	4.7	"The relevant examples were helpful."

Subjective Findings

After the educational program was finished, many health care workers expressed how valuable the information, presented in the program, was to make their jobs safer.

Comments were also made about the presented information being helpful to enable health care workers to have more skills in dealing with patients during difficult situations.

Sample comments included: “I liked the handout”, “The information was clear and concise”, and “the relevant examples were helpful.” In addition, health care workers also expressed appreciation to the instructor for presenting a significant amount of interesting information during the presentation. Another positive comment was that the participant appreciated having pertinent supplemental material to what was originally covered in the orientation process and annual employee training. In general, feedback about the presentation was positive and encouraging. Some health care workers expressed interest in obtaining more information to enhance a safer, positive environment for both the staff and patients. One area of concern was frustration at not having an effective policy in place to deal with WPV.

CHAPTER FIVE

DISCUSSION

Limitations

The biggest limitation of the project was that the participants were not “coded” in an effort to match individual pre-test and post-test scores. This study strived to achieve total anonymity, so a decision was made to compare only the overall mean scores of the studies. This may have limited measuring the specific increase in each participants score, possibly skewing overall results.

Another challenge with this project was obtaining approval to proceed with the presentation of the educational intervention in a timely manner. Changes in facility personnel led to time constraint issues. Several key members of the facility’s senior management team, who originally had approved the project, retired and/or changed jobs prior to the implementation of the educational intervention. This change in senior management required re-evaluation and re-approval of the project by the organization’s new senior managers. This new group requested that the presentation be amended and one of the original test questions be discarded, thus limiting the data collected.

This delay in approval also led to the inability to present the educational program during the annual training. Employee annual training occurs during May/June, allowing numerous employees opportunities to obtain the yearly required hours of facility

continuing education. This postponement limited the time frame and opportunities that the intervention could be presented to employees.

Another contributing factor for the low response may have been the high utilization of vacation time during the summer months by the facility employees. Employees take more vacation time during the summer months more than other times of the year (P. Prigge, personal communication, May 12, 2016). This limited the employees onsite and available for the educational intervention.

A G-power analysis indicated that a sample group of thirty-six individuals was desired for the study. Unfortunately, only eighteen participants were able to be included. This reduction in participants may have limited the significance of the findings. The facility personnel changes, missing the annual employee training time frame, and high summer vacation rates likely contributed to lowered participation numbers. Utilizing a decreased number of participants also may not have resulted in a true representative sample of health care workers at the facility.

An additional drawback was the time limit of ninety minutes for the presentation, and pre/post-test, and evaluation. Subjective feedback indicated that employees would have liked to have more time to take the tests and more thoroughly complete the evaluation. The participants also commented that they would have benefitted from participatory or “round table” type discussions about WPV. This round table discussion would have allowed clarification of the questions and answers, which would have greatly aided in the knowledge conveyed to the participants, and the validity of the test.

Another limitation of this project is the fact that test was not initially or subsequently validated. The test was not examined by any direct health care staff, other than senior management, prior to its administration. The fact that the questions and program were directly taken from the CDC website does give a degree of reliability that the questions are all valid, but further validation could have further validated the results.

Recommendations for Future Projects

This project helped to validate that an evidence-based educational program regarding WPV could enhance health care workers' knowledge base in regard to this topic. Although the participant numbers were small, the participants demonstrated significantly increased knowledge after the intervention.

An implication for future projects would be coding to match each participant's pre-test and post-test scores as it will better represent knowledge gained as a result of the educational program. In retrospect, the study would have been able to maintain anonymity by having each participant select a random numbered test, remember the number, and then put that random number on the post test. This would provide a link to the participant and their pre/post-test scores. This would have given a truer picture on the individual effects of the intervention.

In addition, allocating additional time to complete the project might help prevent unforeseen circumstances from affecting initiation of the project. The time constraint that took effect when additional permission from the facility was needed due to the change in senior management may have been averted if more time was allocated for the project.

Also, offering the educational project when annual training opportunities are ample and high vacation times are not being utilized might also increase the availability of a larger, more representative sample group in an effort to obtain more accurate data. Future research in this area would benefit by; 1) sampling a larger cross section of employee work groups, 2) allowing more time to conduct the training courses to ensure all groups were reached, and 3) assuring that the desired sample size was attained.

Another implication for further projects would be to allocate additional time for the educational intervention itself. By allowing participants to take more time to complete the pre/post-test and the evaluation, the tests could have been reviewed with the participants to ensure validation/understanding. Furthermore, a practice exam could be given to a small representative group to ensure that the questions are clearly written, and that the participants understood the concepts of the intervention. After the practice exam, the answers could be reviewed as a group. This would ensure that the participants understood the interpretation of the questions. Questions that were answered incorrectly could help the researcher determine whether the question was confusing to the participants or that they didn't acquire the intended knowledge through the intervention. The researcher could then adjust the test questions and administer to another set of participants to ensure the adjustments are clarified.

An additional benefit would be "roundtable" discussion with participants relating to WPV and the intervention itself. After the post test was given, the test should be reviewed with the participants to clarify understanding of the participant's answers and the intervention material, itself. This would allow for reinforcement of the training, and a

chance to clear up any confusing questions. Confusing questions could be removed from the study, helping to strengthen the intervention results. Other benefits of this discussion would be an increase in the intervention's validity, reliability, and overall effectiveness of the intervention.

Finally, a longitudinal project might also identify any correlation between this type of evidence-based WPV education and an overall reduction of incidents and/or injuries related to WPV within healthcare organizations. OSHA (2015a), reports that having "a written program for workplace violence prevention, incorporated into an organization's overall safety and health program, offers an effective approach to reduce or eliminate the risk of violence in the workplace." (p.5). Further studies at this facility, may provide some positive data in incident/injury reduction.

Implications for Nursing

Clinical Practice

"The health care industry leads all other sectors in the incidence of non-fatal workplace assaults" (Emergency Nurses Association [ENA], 2010, para.1). Violence against health care workers is occurring at an alarming rate both in the United States and worldwide. Health care workers, who have a greater knowledge level in dealing with WPV, may provide a safer and more effective workplace for patients and staff alike. A similar study to this intervention was conducted at Trauma Studies Centre de Recherche, in Montreal, Canada, by Guay, S., Goncalves, J. & Boyer, R., (2012). This study also used an intervention, and a pre/post-test. An education and training program, designed to

better prevent and manage situations of aggression in the workplace was presented to participants. The study group showed significant improvements on all measured variables in the study after the post test. Martin & Daffern (2006), showed the importance of mental healthcare workers, who are at high risk of violence, to have confidence in their abilities to work with aggressive patients. These studies both mirror the current intervention. By following the principles of Roy's adaptation theory, trained health care workers can adapt to the situation around them, and effectively manage WPV. From a nursing perspective, a comprehensive WPV prevention program could enable health care workers to more effectively address WPV by utilizing evidence-based information to effectively manage difficult individuals.

The facility could also provide a designated employee who has had comprehensive training specifically related to WPV prevention. This employee could also function as a mentor to provide additional education and skills to successfully deal with difficult patients. Having a successful WPV prevention program in place could promote this area of health care worker education as well as enhance patient care, safety, and employee morale. Gallup research has consistently shown a link between a worker's feelings of safety and security in the workplace and morale. "Improving communication about safety sends a strong message about commitment and improves worker dedication and morale" (Wagner, 2015, para. 2).

Patient Safety

The rate of assaults against health care workers has increased dramatically in the past few decades, complicating treatment for patients. Health care workers, who possess

enhanced knowledge regarding the handling of violent individuals can better cope with potentially violent situations. As a result, perhaps, these skilled health care workers could prevent violence from occurring or, at the very least, minimize the impact on patients.

Staff being prepared to manage emergent interventions taught in the training program could significantly reduce the frightening experience for other patients witnessing the event. Several early studies show that “secondary victims” of WPV may also be traumatized or harmed by witnessing or physically affected by the incident, and, as such, may suffer similar negative effects including physical and psychological health problems (Kelloway, Barling, & Harrell, 2006, p. 362).

Implications for Employers

Policy Changes

Providing adequate training to more effectively manage difficult patients is the first step toward providing a safe environment for all and, as a result, optimizing the quality of care delivered to patients. “One of the best protections employers can offer their workers is to establish a zero-tolerance policy toward workplace violence” (OSHA, n.d., “how can workplace hazards be reduced?” para.1). Establishing guidelines for health care workers to follow will provide both employers and employees guidance in dealing with violent individuals. These guidelines would identify evidence-based practice and set a standard for appropriate training.

According to Lipscomb & London (2015), “the training should be organization-, worksite-, and job-specific, covering risk factors, prevention measures, and relevant

policies and procedures for each worker and lastly, should not be a generic training” (p. 59). Essentially, training is most effective if it is relevant to the job, clearly conveyed, and clearly understood.

Lastly, complete reporting and the prompt investigation of incidents are critical means of evaluating the effectiveness of WPV training programs and identifying additional control measures that may need to be modified or implemented (Lipscomb & London, 2015, p. 64). Accurate reporting and investigation brings incidents into the forefront, where they may be analyzed in an effort to better understand and, ultimately, minimize impacts or eliminate future incidents altogether.

Conclusion

Workplace violence should not be a routine part of a health care worker’s job and has the potential to have lasting negative effects on both health care workers and patients. Many health care workers do not possess sufficient knowledge to effectively manage violent patients and other individuals. Developing an evidence-based, comprehensive, WPV prevention program is not only essential to provide optimal care for patients, but is also essential to assure the optimal safety of employees within health care organizations.

A successfully implemented WPV prevention program will enhance a health care worker’s knowledge base to more effectively manage difficult patients. In addition, it is proposed that this additional knowledge will also further improve health care workers’ confidence to provide optimal care for patients while keeping themselves, other staff, and the patients safe.

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APPENDICES

APPENDIX A

SEARCH RESULTS

Search Results

	CINAHL	PUBMED	MEDLINE	PSYCINFO
Violence against health care workers	0	13	16	2
Violence against nurses	14	33	16	11
Workplace safety	240	13	84	226
Preventing injuries to employees	2	19	0	1
Assaults by patients	518	28	39	86
Assaults on health care workers	0	6	7	9
Callista Roy's Adaptation Theory	6	0	0	1
Total	780	112	162	336

APPENDIX B

FACILITY APPROVAL REQUEST

April 19, 2016

To: Dave Olson, RN, DON

Dear Dave,

I am writing this letter as a follow up per our previous conversation for Montana State Hospital IRB approval via the senior management team regarding my scholarly project on workplace violence. Since our last conversation, I have completed my educational project power point along with the pre-test, post-test, and evaluation. I have also received Montana State University's IRB approval to move forward. I have attached all for review by senior management/IRB. I would again like to reiterate how applicable this topic is in all health care venues and, especially in the psychiatric setting.

The goal of this project is to help direct care workers gain knowledge to be safe when caring for patients. Benefits for the hospital will be educating direct care workers to be mindful of their own personal safety thus decreasing injuries to both themselves and patients. Ultimately, a great accomplishment would be decreasing the rate of physical interventions and reducing distress involved for staff and patients alike that are associated with these occurrences. I will continue progressing through this project this with the advice and guidance of my graduate committee members. Additionally, there will be no requests for confidential information regarding patients or employees of the hospital.

Thank you in advance for consideration of my request. I appreciate your time and anticipate your response.

Sincerely,

Eleanor Combs, BSN, RN- DNP student

APPENDIX C

FACILITY APPROVAL



Department of Public Health and Human Services

Addictive and Mental Disorders Division • Montana State Hospital • P.O. Box 300 • Warm Springs, MT

59726 • Voice: 406-693-7000 • Administration Fax: 406-693-7009 • Health Information Fax: 406-693-7160

• Admissions Fax: 406-693-7037

Steve Bullock, Governor

Richard H. Opper, Director

June 29, 2016

Dear Eleanor,

The senior management team has reviewed your educational program and you are now permitted to present to the employees.

Thank You,

Sincerely,

A handwritten signature in black ink, appearing to read "David Olson".

David Olson

APPENDIX D

IRB EXEMPTION



INSTITUTIONAL REVIEW BOARD
For the Protection of Human Subjects
FWA 00000165

960 Technology Blvd. Room 127
 c/o Immunology & Infectious Diseases
 Montana State University
 Bozeman, MT 59718
 Telephone: 406-994-6783
 FAX: 406-994-4303
 E-mail: cherylj@montana.edu

Chair: Mark Quinn
 406-994-5721
 mquinn@montana.edu
Administrator:
 Cheryl Johnson
 406-994-6783
 cherylj@montana.edu

MEMORANDUM

TO: Eleanor Combs and Christina Sieloff
FROM: Mark Quinn, Chair *Mark Quinn CJ*
DATE: April 13, 2016
RE: "An Educational Program to Increase Staff Knowledge and Skills in the Therapeutic Management of Violent Behaviors by Patients" [EC041316-EX]

The above research, described in your submission of April 13, 2016, is exempt from the requirement of review by the Institutional Review Board in accordance with the Code of Federal regulations, Part 46, section 101. The specific paragraph which applies to your research is:

- ☐ (b) (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- ☒ (b) (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.
- ☐ (b) (3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
- ☐ (b) (4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available, or if the information is recorded by the investigator in such a manner that the subjects cannot be identified, directly or through identifiers linked to the subjects.
- ☐ (b) (5) Research and demonstration projects, which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.
- ☐ (b) (6) Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed, or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the FDA, or approved by the EPA, or the Food Safety and Inspection Service of the USDA.

Although review by the Institutional Review Board is not required for the above research, the Committee will be glad to review it. If you wish a review and committee approval, please submit 3 copies of the usual application form and it will be processed by expedited review.

APPENDIX E

CENTER FOR DISEASE CONTROL PERMISSION

CDC Stacks is a free, digital archive of scientific research and literature produced by the Centers for Disease Control and Prevention (CDC). This online archive is composed of curated collections tailored for public health research needs. This repository is retained indefinitely and is available for public health professionals, researchers, as well as the general public.

CDC Stacks provides access to current CDC research and literature such as the Open Access Collection. In addition, CDC Stacks offers a historical perspective that was previously not available, such as the first 30 volumes of the Morbidity and Mortality Weekly Report.

As a fully-featured repository, CDC stacks provides the ability to search the full text of all documents, browse journal articles by public health subjects, and explore the curated collections of documents on relevant topics. Additional collections and ongoing additions to existing collections are planned for the future.



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APPENDIX F

G-POWER ANALYSIS TO DETERMINE SAMPLE SIZE

t tests - Means: Difference between two dependent means (matched pairs)

Analysis: A priori: Compute required sample size

Input:	Tail(s)	=	Two
	Effect size dz	=	0.5
	α err prob	=	.1
	Power (1- β err prob)	=	.9
Output:	Noncentrality parameter δ	=	3.0000000
	Critical t	=	1.6895725
	Df	=	35
	Total sample size	=	36
	Actual power	=	0.9025768

APPENDIX G

WPV EDUCATIONAL POWER POINT PRESENTATION

AN EDUCATIONAL PROGRAM TO INCREASE STAFF KNOWLEDGE AND SKILLS IN THE THERAPEUTIC MANAGEMENT OF VIOLENT BEHAVIORS BY PATIENTS

ELEANOR COMBS



DEFINITION OF VIOLENCE



According to the World Health Organization (WHO, 2015):

“The intentional use of physical force or power, threatened or actual, against oneself, another person, against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation”

TYPES OF VIOLENCE

- **Type 1: Violence by a stranger with criminal intent**
- **Type 2: Violence by a customer or client**
- **Type 3: Violence by a co-worker**
- **Type 4: Violence by someone in a personal relationship**

(Lipscomb, 2014)

The most common type of health care violence is Type 2 and will be the key focus of this educational project. This project also considers the customer/client relationship to include patients, their family members, and visitors

INTERESTING FACTS:

- The Occupational Safety and Health Administration (OSHA, 2015), stated that nearly two million workers report being victims of workplace violence (WPV) each year.
- Reports of violence are most frequent in psychiatric, geriatric, and emergency departments (BLS as cited in OSHA, 2015)
- Those working in a psychiatric setting are at a significantly greater risk of experiencing violence than any other area (BLS as cited in OSHA, 2015)
- Currently, WPV is the fourth leading cause of death, and is the leading cause of death among women in the workplace (Monson et. al., 2011; Swan & Mitus, 2014)
- Statistics about WPV are often confusing and difficult to reconcile due to the different criteria and sampling methodologies (CDC, 2014)

COMMON RISK FACTORS FOR VIOLENCE

- Prior history of violence
- Are in the forensic/criminal justice system
- Psychotic disorders in patients
- Drug and alcohol use
- Overcrowding
- Long waits for service
- Are in pain

(CDC, 2014)

MORE RISK FACTORS

- Inadequate security
- Understaffing
- Poor environmental design
- Poorly lit corridors, rooms, parking lots
- Insufficient visitor policies for the public
- Inadequate policies for preventing and managing crisis with potentially volatile patients

(CDC, 2014)

INTERESTING FACT:

76% of Emergency Room nurses said their decision to report violence would be based on whether the patient was perceived as being responsible for their actions

(CDC, 2014)

VIOLENCE OFTEN TAKES PLACE DURING HIGH ACTIVITY TIMES AND WHILE INTERACTING WITH PATIENTS:

- Meal times
- Visiting hours
- Medication times
- Patient transportation

(CDC, 2014)

ENVIRONMENTAL RISK FACTORS FOR WPV

Environmental risk factors are those that are attributed to the layout, design, and amenities of the physical work space and include factors that:

- Provide opportunity to gain access or avoid detection, such as unmonitored stairways or entries, insufficient lighting, blind corners, unsecured rooms, or closets
- Increase stress, such as signage that is confusing, poor weather conditions, difficulty parking or accessing a building, insufficient heat or air conditioning, and disturbing noise levels
- Provide opportunities to be used as weapons such as unsecured furniture, decorative items, office or medical supplies
- Limit staff's ability to appropriately respond to violent incidents such as the lack of security systems, alarms, or devices

(CDC, 2014)

THE CHALLENGE OF UNDERREPORTING

Many experts believe that current numbers only represent the "tip of the iceberg" and that most incidents of WPV go un-reported for one or more of the following reasons:

A persistent perception within the health care industry that violence is 'just part of the job' (Blundo et al., 2014)

Poor or non-existent institutional policies, procedures, staff training, or supports

Overly complex reporting procedures that create a disincentive for reporting

Concern that violence happens so frequently that its too time-consuming to report every event, in addition to the lack of response when time is taken to report

Fear that reporting will reflect poorly on the health care worker

Belief that some patients cannot be held liable for their violent actions

(CDC, 2014)

ADDITIONAL CONTRIBUTORS TO WPV:

- Increasing numbers of handguns/weapons carried by individuals
- Use of hospitals by police for holds and acutely disturbed individuals
- Increasing levels of Dementia and Alzheimer's Disease among the general population
- Trends of releasing acute and chronically mentally ill patients from facilities without adequate follow-up care
- Perceived availability of drugs or money in health care facilities
- Distraught family members/ friends
- Lack of monitoring systems

(Stokowski, 2010)

WPV CONSEQUENCES ON WORKERS

- Physical injuries:
- Acute/chronic pain
- Short or long term disability
- Emotional reactions that are short and/or long term emotions that may include: anger, sadness, lowered self-esteem, frustration, anxiety, irritability, guilt, loss of confidence in ability, fear of criticism by co-workers and/or supervisors, apathy, emotional exhaustion, self blame, helplessness

(Samir et. al., 2012)

POST TRAUMATIC STRESS DISORDER (PTSD)

- Complex mental illness that results from an individual response to an experienced or witnessed traumatic event, and actual death or perceived threat of death that results in extreme fear, helplessness, or horror
- Those suffering from PTSD experience a wide spectrum of symptoms including flashbacks and nightmares of the event, anger, anxiety, depression, irritability, impaired concentration, difficulty sleeping, panic attacks, hyper-vigilance, and an exaggerated startle response

(Hood, 2011)

11

INTERESTING FACTS:



- It is estimated that 14 % of the overall general nursing population experience the symptoms that meet criteria to be diagnosed with PTSD, which is 4 times higher than the general population

(Hood, 2011)

- If cases of severe trauma are left untreated, they may lead to depression, substance abuse, retaliatory violence, or even suicide

(CDC, 2014)

14

WPV EFFECTS ON HEALTHCARE FACILITIES

- Unfavorable impression of the facility, its workers, and patients
- Increased staff turnover
- Increased absenteeism and use of sick leave
- Increased requests for transfers
- Lower productivity
- Need for physical and psychological care
- Property damage
- Increased security costs
- Increased litigation
- Significant costs are incurred to hire and train replacement staff due to poor employee retention

(CDC, 2014)



15

INTERESTING FACT:



- The average cost of a bedside RN ranges from \$36,700-\$57,300 resulting in the average hospital losing \$4.9- 7.6 million with each percent in RN turnover costing/saving the average hospital an additional \$379,500

(Nursing Solutions Inc., 2015)

16

WPV EFFECTS ON PATIENT CARE

- Disrupted unit operations
- Unanticipated changes in patient mix
- Disproportionate numbers of patients awaiting placement
- Discrepancies between the nursing resources required from acuity measurement and those supplied
- Delayed or omitted tasks
- Increased medication errors

(Roche et. al., 2010)

10

MANAGEMENT COMMITMENT

- Demonstrate organizational concern for employee emotional and physical safety and health
- Exhibiting equal commitment to the safety and health of workers and patients
- Assigning responsibility for the various aspects of the WPV prevention program to ensure that all managers, supervisors, and employees understand their obligations
- Allocating appropriate authority and resources to all responsible parties
- Maintaining a system of accountability for involved managers, supervisors, and employees
- Establishing a comprehensive program of medical and psychological counseling and debriefing to employees experienced or witnessed assaults and other violent incidents
- Supporting and implementing appropriate recommendations from safety and health committees

(OSHA, 2015)



11

EMPLOYEE INVOLVEMENT

- Understanding and compliance with the workplace violence prevention program and other safety and security measures
- Participating in the employee complaint or suggestion procedures regarding safety and security measures
- Reporting violent incidents promptly and accurately
- Participating in safety/health committees or teams that receive reports of violent incidents or security problems, make facility inspections, and respond with recommendations for corrective strategies
- Take part in continuing education programs that cover techniques to recognize escalating behaviors/agitation, assaultive behaviors, criminal intent and discuss appropriate responses

(CDC, 2014)

WORKSITE ANALYSIS

- This consists of a step-by-step, commonsense look at the workplace to find existing or potential hazards for WPV. This includes reviewing specific procedures or operations that contribute to hazard and specific areas where hazards may develop
- A team or coordinator may assess vulnerability to WPV and determine appropriate corrective actions that need to be taken. The recommended program for worksite analysis includes, but is not limited to:
 - Records analysis & tracking
 - Screening surveys
 - Workplace security analysis



(OSHA, 2014)

HAZARD PREVENTION & CONTROL

- Engineering controls address environmental risks by removing hazards from the workplace or create a barrier between the worker and the hazard
 - Example: Enclosing nursing stations/reception areas
 - Designing for safety (two exits per room, furniture arrangement, better lighting)
 - Administrative and work practice controls affect the way staff perform jobs/tasks. Changes in work practices and administrative procedures can help prevent violent incidents
 - Example: Ensuring adequate staff availability especially at risky times, in risky areas, and ensuring nobody is working alone
 - Developing systems for communicating relevant information regarding patient history and behavior by all direct care staff, from one shift to the next
- (OSHA, 2014)

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SAFETY AND HEALTH TRAINING

Training and education ensure that all staff are aware of potential security hazards and how to protect themselves and their co-workers through established policies and procedures. Frequent training can also reduce the likelihood of being assaulted. This includes:

- Types of injuries or problems identified in the facility and methods to control the specific hazards
- Instructions to limit physical altercations whenever possible unless enough staff are available to assist
- Training to behave compassionately toward co-workers when incidents occur

(OSHA, 2014)

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REMOVING BARRIERS TO REPORTING

- Successful workplace prevention empowers health care workers to come forward when incidents occur. Health care workers are more likely to come forward and report, when the process is simple and transparent, and they believe there is a benefit to reporting
- Just as important is what happens after an incident report is filed. Health care workers must know and believe that incident reports are taken seriously and will be acted on in a timely fashion. Those involved should be included in the process and receive feedback regarding the status of the investigation and/or anticipated action

(OSHA, 2014)

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RECORDKEEPING

- Good records help employers determine the severity of the problem, evaluate methods of hazard control and identify training needs. Records can also be especially helpful to large organizations who “pool” data with other like organizations
- Records of injuries, illnesses, accidents, assaults, hazards, corrective actions, patients histories, and training can help identify problems and solutions

(OSHA, 2014)

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EVALUATION

- Employers should evaluate safety and security measures on a regular basis and also after each incident
- Policies and Procedures should be re-evaluated on a regular basis to identify deficiencies and to take needed corrective action

(OSHA, 2014)

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Evaluation Process should include:

- Establishing uniform reporting systems and regular review of reports
- Analyze trends and rates of injuries/fatalities
- Survey employees before and after job and worksite changes
- Information gathered should be shared with all employees. Any changes should be discussed and shared with all employee groups

(OSHA, 2014)



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WHAT CAN YOU DO TO HELP?



PREVENTION STRATEGIES FOR HEALTHCARE WORKERS

- Get involved!!!
- Become familiar with the organization's WPV policies and procedures
- Attend personal safety training programs offered by the organization
- Participate in safety/health committees
- Alert supervisors to any concerns as a soon as possible through recognized reporting procedures

(CDC, 2014)

DRESS FOR SAFETY

- Remove anything from your person that can be grabbed by someone and/or used as a weapon
- Long hair should be tucked away so that it cannot be grabbed
- Jewelry- avoid earrings or necklaces which can be pulled
- Overly loose clothing or scarves can be caught
- Glasses, keys, or name tags dangling from cord chains can be hazardous; make sure to use breakaway safety cords or lanyards

(CDC, 2014)

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BE AWARE OF YOUR WORK ENVIRONMENT

Every work environment has risks- some are static such as configuration of rooms, lighting, hallways, doors, and workstations. Other risks such as the weather, patient load, morbidities, noise levels, and staffing levels are changeable and often unpredictable. Be aware of changes to your environment

(CDC, 2014)

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BE AWARE OF THE FOLLOWING:

- Note exits and emergency phone numbers if you change work areas
- Confusion, background noises and crowding can increase stress levels
- Mealtimes, shift changes, and while transporting patients are all times of increased disruptive behaviors

(CDC, 2014)

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BE ATTUNED TO PATIENT BEHAVIORS

Most violent behavior is preceded by warning signs

Verbal Cues

- Swearing loudly or yelling
- Threatening tone of voice

Non-verbal or Behavioral Cues

- Physical appearance (clothing/hygiene neglected)
- Arms held tight across chest
- Clenched fists
- Heavy breathing

(CDC 2014)

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MORE WARNING SIGNS

- Pacing or agitation
- A terrified look signifying fear/anxiety
- A fixed stare
- Aggressive or threatening posture
- Throwing objects
- Sudden changes in behavior
- Indications of drunkenness or substance abuse

Remember the more cues exhibited- the greater risk of violence

(CDC, 2014)

BE ATTUNED TO YOUR OWN RESPONSES

- Part of violence prevention is to be aware of your own feelings, responses, and sensitivities
- Pay attention to your instincts
- Be aware that the way you express yourself can have a significant impact on how others respond to you
- Effective communication skills are an essential tool in violence prevention
- Self awareness includes acknowledging if you have a personal history of abuse which might affect how you respond to situations that "trigger" your own past experiences
- Fatigue can diminish your alertness and ability to respond appropriately to a challenging situation

(CDC, 2014)

CHECK YOUR SOCIO-CULTURAL BIASES

A key aspect of self-awareness is recognizing our own particular cultural heritage, values, and belief systems affect how we may respond to patients and co-workers, and how they, in turn, respond to us

(CDC, 2014)



LEARN TO RECOGNIZE A CRISIS



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CRISIS

- Is an acute emotional upset
- Typically doesn't occur spontaneously; it is the final stage during which one's usual problem-solving ability fails
- Is manifested in an inability to cope emotionally, cognitively, or behaviorally and solve problems as usual
- Perpetrators of violence are often themselves in crisis (CDC, 2014)

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AVOIDING CRISIS

- Individual responses to stressful or threatening events may vary. Some may move toward acute stress slowly while others may progress much quicker.
- The important thing to remember is that, with appropriate time and intervention, acute crisis can often be avoided
- The challenge for the healthcare workers is recognizing when an individual is moving along the crisis continuum, and utilizing interventions that de-escalate, not escalate, the person's response to stressful or traumatic events (CDC, 2014)

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4 STAGES OF A CRISIS



CRISIS DEVELOPMENT STAGES

Stage 1- Normal stress and anxiety level- the background of crisis development brought about by the minor annoyances and frustrations everyday life. Individuals at this stage are rational and in control of their behavioral responses

(CDC, 2014)

CRISIS DEVELOPMENT STAGES

Stage 2- Rising anxiety level- a heightened condition typically including rapid heart rate and respirations- the person might appear lost or confused about how to solve a problem- voice may be higher pitched or quiver with accelerated speech patterns. Small nervous habits such as tapping fingers or feet may be evident

(CDC, 2014)

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CRISIS DEVELOPMENT STAGES CONT'D

Stage 3- A persons reasoning capacity is seriously diminished, with fixation on the here and now. Behavior typically becomes boisterous and disruptive. Communication may include shouting, swearing, argumentation, and threats. Physical indications include pacing, clenched fists, perspiring, and rapid shallow breathing

(CDC, 2014)

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CRISIS DEVELOPMENT STAGES CONT'D

Stage 4- Characterized by unbearable anxiety, and loss of cognitive, emotional, and behavioral control with urgent need to end the unbearable pain. A person in crisis is unable to solve problems or process information rationally without help. Behaviors of persons in crisis are erratic and unpredictable to the point that they may pose a danger to themselves and others

(CDC, 2014)

USEFUL TOOLS TO HELP YOU MANAGE A CRISIS



EARLY AND MIDDLE STAGES: VERBAL SKILLS

- Your words and demeanor have the power to diffuse tension, so be attuned to the tone of your voice, choice of words, and body language
- Allow the person to express concern ex. "please tell me what is bothering you"
- Use a shared problem-solving approach ex. "how can we correct this problem?"
- Be empathetic ex. "I understand how frustrating this must be for you"
- Avoid being defensive or contradictory: this only exacerbates a tense situation
- Apologize if appropriate- "I'm sorry this happened, let's find a way to fix it"
- Follow through with their problem- "I am going to bring this to my supervisor immediately"
- Avoid blaming others or stating "it's not my job"- Let's get someone who can help with this problem
- *Be alert to signs of a patient's rising anxiety, perhaps offer an empathetic inquiry such as*
- *" you seem to be upset, can you tell me what's bothering you? "*

(CDC, 2014)

EARLY AND MIDDLE STAGES: NON VERBAL SKILLS

- It is important to be cognizant of and control your body position and posture so as not to inadvertently escalate an already tense situation
- Be calm, or at least act calm. Maintain non-threatening eye contact, smile, and keep hands visible and open
- Listen. Nod your head to indicate that you are listening
- Respect personal space. Maintain arm/leg distance from the individual- avoid touching the upset individual as it may be misinterpreted
- Approach the patient from an angle or the side
- Convey that you are in control, by demonstrating confidence in your ability to resolve the situation
- Demonstrate supportive body language, avoid threatening gestures such as pointing fingers or crossing arms
- Avoid laughing or smiling inappropriately

(CDC, 2014)

LATE STAGE INTERVENTIONS

- A person may begin showing loss of control and problem solving ability. Verbal and non-verbal interventions can still be effective but additional precautions and techniques should be taken. Your focus now turns to protecting yourself and those around you
- Enlist the help of additional staff, use your personal assistance device, position to remove yourself and patients from the area-if the person continues to escalate, prepare for a response to the situation

(CDC, 2014)

LATE STAGE: SETTING LIMITS

Limit setting techniques, properly applied, can help by placing some external control on the escalating situation diffusing it and facilitating decision-making: Ex. "Mr. Jones, please calm yourself or I will have to call security"

Keys to effective limit setting are:

- use a command form to express the desired behavior
- provide a logical and enforceable consequence for non-compliance

(CDC, 2014)

- Continue to acknowledge the agitated person's feelings and be empathetic, reminding him/her that you are there to help.
- Do not confuse setting limits with issuing threats which can signal to the patient that the situation is more helpless than they had perceived, and may precipitate a violent response.
- Avoid arguing as that may precipitate a violent resolution of the crisis.

(CDC 2014)

POWER AND CONTROL DYNAMICS

- To prevent violence, a clear understanding of the dynamics of power and control is necessary
- Violence is an abuse of power, an act of exerting control over another person through physical or emotional manipulation
- Never use verbal and physical control tactics yourself. Consider both your external presentation to others as well as how you react internally and emotionally to stressful stimuli. Be aware of your own level of anxiety, fatigue, illness, as well as your beliefs and biases. The goal is to respond thoughtfully and deliberately when such situations arise.

(CDC, 2014)

RESPONSE

An out of control person may require physical and/or chemical restraint in which case the health care organization's policies and procedures should be followed. It is important to continue engaging the patient, telling them what is being done and why

(CDC, 2014)

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GOALS OF CRISIS RESOLUTION

- Prevent violence in the short term
- Assist the patient's return to normal cognitive, emotional, and behavioral regulation
- Avoid crisis recurrence

This process takes time and it's success will be greatly enhanced by a calm, reassuring, and skilled approach toward non-violent crisis resolution

(CDC, 2014)

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AFTER THE STORM



POST INCIDENT RESPONSE FOR THE HEALTHCARE WORKER

- File an incident report and participate in all investigative actions
- Report and injuries (physical or emotional) through the appropriate channels
- Seek counseling when appropriate- everyone responds differently to trauma
- Learn about and utilize support resources offered by the employer/union
- Work with criminal justice authorities if legal action is called for (CDC, 2014)



The order in which a health care worker initiates these actions may depend on the extent of injury or trauma suffered and one's ability to recover

POST INCIDENT RESPONSE FOR THE EMPLOYER

- Supporting the health care workers right to file reports through the legal system and name the perpetrator
- Providing guidance around initiating Workers' Compensation filings
- Initiating procedures to keep the injured health care workers and the assailant separated

(CDC, 2014)

POST INCIDENT TEAM ANALYSIS

- Opportunity to examine the incident with the goal of identifying vulnerabilities in protocols and procedures that, if corrected, might have prevented the incident from occurring. It is also important to recognize and reaffirm those procedures that worked to contain the incident
- The power dynamics from perspective of the patient and the injured health care worker
- The de-escalation tactics and crisis intervention strategies used
- The role of hospital management and security
- The health care workers perspectives of administrative support and follow-up care
- What the team as a whole can learn from this incident about prevention and how it was handled without blaming the victim

(CDC, 2014)

LEGAL OPTIONS

- Healthcare workers are encouraged to consider filing criminal charges with law enforcement against perpetrators when circumstances warrant.
- Laws vary by jurisdiction and the health care worker should seek legal guidance before filing a criminal complaint against a cognitively impaired patient
- Ideally, a healthcare organization's health and safety policies should spell out the legal and mental health grounds for pursuing criminal action

(CDC, 2014)

RECOVERY AND REPORTING BACK TO WORK



THE HEALTHCARE ORGANIZATION SHOULD BE A SOURCE OF SUPPORT EVEN THOUGH THE INJURED HEALTH CARE WORKER MAY HAVE OUTSIDE OF WORK THAT INCLUDE:

- Medical
- Psychological
- Social- from supervisors & co-workers
- Financial- in the event of work loss
- Legal
- Security- escorts or customized safety programs

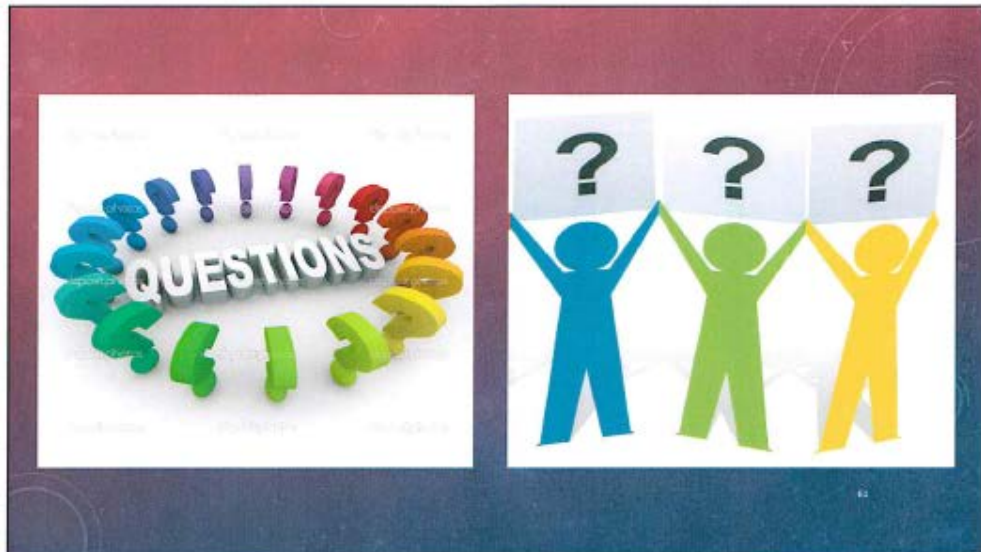
(CDC, 2014)

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With good workplace violence prevention policies in place, the healthcare organization can continue to adapt policies based on newly understood risks, and the health care worker can learn and evolve



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APPENDIX H

PRE/POST-TEST QUESTIONS

Pre-Test Multiple choice questions may have more than one correct answer. Circle the correct choice(s)

1. The most common type of workplace violence in health care settings is:
 - A. type 3: worker-on-worker
 - B. type 4: personal
 - C. type 2: patient/client/visitor
 - D. type 1: criminal intent
2. Health care workers often fail to report incidents of workplace violence because:
 - A. Violence is accepted as part of the job
 - B. Health care workers often fear being blamed for doing something wrong
 - C. Health care workers believe that some patients cannot be held accountable for their actions
 - D. There is no obvious benefit to reporting
3. Statistics about violence are often confusing and difficult to resolve due to:
 - A. Most incidents are unintentional and shouldn't be reported in the first place
 - B. A pervasive belief that nothing will change or be done about it anyway, so why report it?
 - C. The different criteria and sampling methods used by various reporting agencies
4. What are the possible consequences of workplace violence toward health care staff?
 - A. Standards of care not met
 - B. Medical errors
 - C. Use of sick leave
5. Healthcare violence leads to which of the following?
 - A. Decreased absenteeism
 - B. Lower productivity
 - C. Decreased requests for transfers
 - D. Use of sick leave
6. What are the cultural factors that contribute to workplace violence in the nursing profession?
 - A. Focus on patient safety and customer service
 - B. Belief that workplace violence is just part of the job
 - C. Complacency about workplace violence
7. What are the 4 categories of risk factors for health care-related violence?
 - A. Medical, cultural, organizational, and socio-economic
 - B. Nursing care, cultural, organizational, and political economy
 - C. Service delivery, environmental, organizational, and community/economic

8. What are OSHA's 5 major components of an effective safety and health program?
 - A. Employee commitment, worksite analysis, hazard prevention, and control, safety and health training, recordkeeping, and program evaluation
 - B. Management commitment, worksite analysis, hazard prevention and control, safety and health training, recordkeeping, and program evaluation
 - C. Management commitment, worksite analysis, hazard prevention and control, medication training, recordkeeping and program evaluation
9. Which of these are basic measures individual health care workers can take to minimize the risk of workplace violence?
 - A. Removing anything from your person that can be used as a weapon
 - B. Working as many double shifts as allowed to gain experience
 - C. Acknowledging a personal history of abuse exists, it may impact your thought process
 - D. All of the above
10. For health care workers who must work away from a healthcare institutional setting, many violent incidents can be prevented by taking which of the following responses?
 - A. Check patient records for notes concerning a history of violence
 - B. Check to see if patient (or family member) is on a sexual predator list
 - C. Travel with a phone
11. An acutely distressed person is essentially out of control on which of the following levels?
 - A. Behavioral, emotional, biophysical
 - B. Biophysical, behavioral, cognitive
 - C. Cognitive, financial, behavioral
 - D. Cognitive, behavioral, emotional
12. In non-verbal intervention, what is the best placement of the hands?
 - A. Clasped behind back
 - B. In the pockets
 - C. Visible and palms open
 - D. Tucked into armpits
13. Which of the following statements best exemplifies effective limit setting?
 - A. "Why can't you just stop yelling and be quiet?"
 - B. "Can you please stop yelling and sit down? Otherwise I'll have to call security."
 - C. "Please sit down, otherwise I'll have to call security for help."
 - D. "I can see your frustration and I really want to help you. Please calm yourself and sit down so I don't have to call security for help."

14. Organizations should do which of the following for employees after a violent incident?
 - A. Advise employee not to seek legal services
 - B. Discourage the employee from filing a workers' compensation form
 - C. If the perpetrator is a patient, have the employee apologize and tend to the patients needs
 - D. Provide a non-mandatory access to the counselors as part of the employer's standard response procedures
15. There is no need to file an incident report when:
 - A. The incident is only a verbal threat
 - B. The physical result did not result in any injuries
 - C. The assailant was a cognitively impaired Alzheimer's patient
 - D. The patient appeared agitated, but did not act out physically or verbally
16. Which of these is a goal of post-incident team analysis?
 - A. To learn who was responsible for inciting the incident and establish blame
 - B. To provide a forum for complaints about failures of management to prevent such incidents in the first place
 - C. Crisis care and support of the injured health care worker
 - D. To identify and correct vulnerabilities in the present workplace violence prevention protocols and procedures
17. Psychological injuries can cause depression. True False
18. Health and safety concerns play a major role in health care worker's decisions to remain in the profession True False
19. The Occupational Safety and Health Administration (OSHA) uses the General Duty Clause of The Violence Occupational Safety and Health Act OF 1970 as its enforcement authority regarding workplace True False
20. Certain verbal and non-verbal cues can help a health care worker to recognize when someone poses a greater threat for violent behavior True False
21. When a person folds their arms tightly across their chest, it means that they are getting ready to commit a violent act True False
22. Health care professionals must rely on instinct alone to determine if someone is about to become violent True False

23. Risk assessment tools predict with 100% accuracy which individuals are going to act out in a violent manner True False

24. Long waits can incite violent responses from individuals True False

APPENDIX I

PRE/POST-TEST KEY

Pre-test and Post-Test Key Multiple choice questions may have more than one correct answer. Circle the correct choice(s)

1. The most common type of workplace violence in health care settings is:

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- A. Medical, cultural, organizational, and socio-economic
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- A. Employee commitment, worksite analysis, hazard prevention, and control, safety and health training, recordkeeping, and program evaluation
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- B. Working as many double shifts as allowed to gain experience
- C. Acknowledging a personal history of abuse exists, it may impact your thought process
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10. For health care workers who must work away from a healthcare institutional setting, many violent incidents can be prevented by taking which of the following responses?

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- D. Tucked into armpits

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- B. "Can you please stop yelling and sit down? Otherwise I'll have to call security."
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- D. "I can see your frustration and I really want to help you. Please calm yourself and sit down so I don't have to call security for help."

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- C. If the perpetrator is a patient, have the employee apologize and tend to the patients needs
- D. Provide a non-mandatory access to the counselors as part of the employer's standard response procedures

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- A. The incident is only a verbal threat
- B. The physical result did not result in any injuries
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- A. To learn who was responsible for inciting the incident and establish blame
- B. To provide a forum for complaints about failures of management to prevent such incidents in the first place
- C. Crisis care and support of the injured health care worker
- D. To identify and correct vulnerabilities in the present workplace violence prevention protocols and procedures

17. Psychological injuries can cause depression True False
18. Health and safety concerns play a major role in health care worker's decisions to remain in the profession True False
19. Certain verbal and non-verbal cues can help a health care worker to recognize when someone poses a greater threat for violent behavior True False
20. When a person folds their arms tightly across their chest, it means that they are getting ready to commit a violent act True False
21. Health care professionals must rely on instinct alone to determine if someone is about to become violent True False
22. Risk assessment tools predict with 100% accuracy which individuals are going to act out in a violent manner True False
23. Long waits can incite violent responses from individuals True False

APPENDIX J

EDUCATIONAL PROGRAM EVALUATION

Program Evaluation Form

We would like to take a few minutes to ask you some questions about your opinion regarding this presentation. Please be constructive in your feedback, whether positive or negative. We strive to make continuous improvements in our educational process. Your feedback will be valuable in achieving this goal. Please rate on a scale from 1 (strongly disagree) to 5 (strongly agree).

1. The Workplace Violence Prevention module was informative and enhanced my knowledge base on health care violence.

1 2 3 4 5

2. The test was in line with the material presented.

1 2 3 4 5

3. The workplace violence presentation module instructor was knowledgeable and able to answer my questions.

1 2 3 4 5

What was most beneficial today?

What was least beneficial today?

Have you personally dealt with workplace violence in the last 3 months?

_____ If yes, how many times? _____

APPENDIX K

T-TEST: PAIRED TWO SAMPLE FOR MEANS

<i>t-Test: Paired Two Sample for Means</i>		
	<i>Pre-Test Score</i>	<i>Post-Test Score</i>
Mean	15.94444444	19.83333333
Variance	3.58496732	3.911764706
Observations	18	18
Pearson Correlation	-0.112574317	
Hypothesized Mean Difference	0	
df	17	
t Stat	-5.713236021	
P(T<=t) one-tail	1.2684E-05	
t Critical one-tail	1.739606726	
P(T<=t) two-tail	2.5368E-05	
t Critical two-tail	2.109815578	