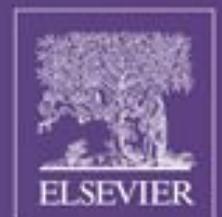


Journal of EMERGENCY NURSING

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- Forensic Nurse Hospitalist: The Comprehensive Role of the Forensic Nurse in a Hospital Setting
- Drug Overdose, Loss of Consciousness, and Compartment Syndrome: A Life-Threatening Combination
- Diagnostic Sensitivity of the Dynamic Appraisal of Situational Aggression to Predict Violence and Aggression by Behavioral Health Patients in the Emergency Department
- Prosecutor Preference for Forensic Nurse Testimony: Outcome of Expanding a Forensic Program
- Evidence-Based Nursing Care for Spinal Nursing Immobilization: A Systematic Review
- Report and Prevent: A Quality Improvement Project to Protect Nurses From Violence in the Emergency Department
- Intimate Partner Violence Screening in the Emergency Department: A Quality Improvement Project





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SEARCH STRATEGY

Set No.	Searched for	Databases	Results
S1	Journal of Emergency Nursing	Ebook Central, Public Health Database, Publicly Available Content Database	76792*

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Caring for Victims of Violence: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

In the emergency department we care for patients across the entire lifespan, including any element that faces us: from the baby we just delivered, the pediatric patient with reactive airway disease, the victim of violence, the behavioral health patient, or the victim of sexual assault, to the patient taking his/her last breath. The National Center for Health Statistics estimates that approximately 37.2 million people visit an emergency care setting for injury-related complaints annually.¹ The National Hospital Ambulatory Medical Care Survey showed that in 2016 there were 1.6 million visits to emergency departments in the United States for assault alone.² It is reported that over 1 million lives are lost annually as a result of self-inflicted, interpersonal, or collective violence.¹ The National Coalition Against Domestic Violence estimates that more than 10 million people become victims of abuse annually in the United States, which means that on average 20 people experience intimate partner abuse every minute. The “Trafficking in Persons Report” released in June, 2019, by the U.S. Department of State, reported that 24.9 million people are victims of human trafficking.⁴ It is staggering that approximately two-thirds of these victims will interface with the health care system at some point without being identified.⁵ Caring for victims of various types of violence is not something for which we are all consistently trained.

FULL TEXT

As emergency nurses, we are at the frontline of the health care system and are the safety net of our communities. We truly see and care for many patients who have not received care elsewhere. We all know that nursing school provides us the foundation to be a nurse; however, few say that nursing school prepares us to actually be an EMERGENCY nurse. That only comes with experience. In the emergency department we care for patients across the entire lifespan, including any element that faces us: from the baby we just delivered, the pediatric patient with reactive airway disease, the victim of violence, the behavioral health patient, or the victim of sexual assault, to the patient taking his/her last breath.

How are we prepared to face these challenges continuously presented to us? Some of us were simply trained on the job, maybe within a few shifts of shadowing another nurse; others were given more intensive residency training that lasted several months. Whatever training model you followed to begin your career as an emergency nurse, you would likely agree that it did not seem enough, and especially did not seem enough to make you feel trained to care for a victim of interpersonal violence or to handle a forensic case.

The National Center for Health Statistics estimates that approximately 37.2 million people visit an emergency care setting for injury-related complaints annually.¹ The National Hospital Ambulatory Medical Care Survey showed that in 2016 there were 1.6 million visits to emergency departments in the United States for assault alone.² It is reported that over 1 million lives are lost annually as a result of self-inflicted, interpersonal, or collective violence.¹ The National Coalition Against Domestic Violence estimates that more than 10 million people become victims of abuse annually in the United States, which means that on average 20 people experience intimate partner abuse every minute. Intimate violence represents 15% of all violent crimes.³

The number of people affected by violence alone, according to the statistics above, is frightening. The “Trafficking in Persons Report” released in June, 2019, by the U.S. Department of State, reported that 24.9 million people are victims of human trafficking.⁴ It is staggering that approximately two-thirds of these victims will interface with the health care system at some point without being identified.⁵

Caring for victims of various types of violence is not something for which we are all consistently trained. These are

cases that not all of us see on a regular basis, depending on the type of care setting in which we work. However, we must be ready for whoever comes through our door at any point in time.

Thankfully, the Emergency Nurses Association (ENA) has resources available to help us identify and care for these victims/survivors. Some of these resources are the result of our ENA members recognizing a need and speaking up to advocate for their patients at the general assembly and asking ENA to create the necessary resources when they noticed there was a gap in our practice. Even as resources are created and disseminated, we may never know the full impact they have; however, we do know that by speaking up and asking ENA to help provide these resources we are positively affecting our profession and our patients. Remember, "One Person Can Make A Difference!"

DETAILS

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The ED Nurse Manager's Guide to Utilizing SWOT Analysis for Performance Improvement: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

The SWOT analysis tool was originally created in the 1960s as a business strategy brainstorming tool to assess and analyze similarities and differences between an organization and its competition.³ Advantages to completing and utilizing SWOT analysis include, but are not limited to, providing awareness of potential and critical problems affecting an organization, focusing on both the positive and negative facets of the internal (intrinsic) and external (extrinsic) organizational environment, aiding in the recognition of opportunities for the organization, and its simplistic use.⁴⁻⁶ The SWOT tool includes 4 main assessment elements: strengths, weaknesses, opportunities, and threats (Table 1). Strengths and opportunities are facilitators that help a department or organization achieve goals, whereas weaknesses and threats are barriers to achieving goals.³ Each element is then assessed by answering a series of questions through brainstorming that focuses on both intrinsic and extrinsic factors.⁷ Completing SWOT analysis is typically part of an organization's overall strategic management process.⁴ Applying the SWOT Analysis The SWOT analysis is not a new management tool. Opportunities (facilitators) and threats (barriers) are external to the organization, and although an organization can benefit from opportunities and guard against threats, they cannot be changed.⁴ The purpose of this article is to guide the ED nurse manager in the application of this useful method through a step-by-step approach.² Step 1- Determine the Need In line with strategic planning, SWOT analysis should be completed on an annual basis and as needed in relation to the organization's mission, vision, and goals.⁹ Within the health care realm and specifically in emergency departments, SWOT analysis should be implemented when financial constraints occur, when patient outcomes are undesirable, when patient satisfaction has decreased, when safety issues arise, and/or when patients choose other health care organizations to obtain care. Step 2- Gather the Team In performing and answering the SWOT analysis, all relevant stakeholders should be included.¹⁰ Stakeholders should include staff, nurses, and members of the interdisciplinary team, including physicians, nurse practitioners, physicians' assistants, and therapists, if applicable. [...]during the adjourning stage, the majority of the goals have been obtained and documented with action plans in place, if needed.

FULL TEXT

Contributions to Emergency Nursing Practice

- The current literature on performing strengths, weaknesses, opportunities, and threats (SWOT) analysis as a useful tool for improvement indicates the need for ED nurse managers to take inventory of their unit and complete a SWOT analysis to improve quality, safety, or new services as needed.
- This article contributes processes and guides about completing a SWOT analysis for improvement in an emergency department.
- Key implications for emergency nursing practice found in this article include educating nurse managers on their ability to assess SWOT of their department for improvement and create an action plan.

The ED nurse manager thrives in a turbulent environment. However, complacency may sink in and produce a reluctance to change, thereby allowing the department to become a stagnant environment that may or may not be safe, innovative, or of high quality.¹ Every ED nurse manager in a health care organization is asked to improve the elements of their department, whether that be quality, safety, or new services. This planning cannot take place without knowing the mission and vision of the organization through strategic planning.² The ED nurse manager must know the goals for the organization and align the department plan with that endeavor. This will allow the ED nurse manager to be not only knowledgeable about the department but also a vital force in achieving the goals outlined by a high-functioning health care system. One aspect to making the needed change is a unit self-assessment through the use of strengths, weaknesses, opportunities, and threats (SWOT) analysis.

The SWOT analysis tool was originally created in the 1960s as a business strategy brainstorming tool to assess and analyze similarities and differences between an organization and its competition.³ Advantages to completing and utilizing SWOT analysis include, but are not limited to, providing awareness of potential and critical problems affecting an organization, focusing on both the positive and negative facets of the internal (intrinsic) and external (extrinsic) organizational environment, aiding in the recognition of opportunities for the organization, and its simplistic use.⁴⁻⁶ The SWOT tool includes 4 main assessment elements: strengths, weaknesses, opportunities, and threats (Table 1). Strengths and opportunities are facilitators that help a department or organization achieve goals, whereas weaknesses and threats are barriers to achieving goals.³ Each element is then assessed by answering a series of questions through brainstorming that focuses on both intrinsic and extrinsic factors.⁷ Completing SWOT analysis is typically part of an organization's overall strategic management process.⁴

Applying the SWOT Analysis

The SWOT analysis is not a new management tool. However, it is rarely discussed in the literature for utilization in health care organizations; hence, many nurse leaders may be reluctant to utilize this instrument for fear of making a mistake because of lack of exposure.⁸ Utilizing an integrated quality improvement tool such as SWOT analysis provides benefits that the ED nurse manager may not be familiar with in the administrative environment. Strengths (facilitators) and weaknesses (barriers) are internal to the organization and in most instances can be controlled or changed. Opportunities (facilitators) and threats (barriers) are external to the organization, and although an organization can benefit from opportunities and guard against threats, they cannot be changed.⁴ The purpose of this article is to guide the ED nurse manager in the application of this useful method through a step-by-step approach.²

Step 1- Determine the Need

In line with strategic planning, SWOT analysis should be completed on an annual basis and as needed in relation to the organization's mission, vision, and goals.⁹ Within the health care realm and specifically in emergency departments, SWOT analysis should be implemented when financial constraints occur, when patient outcomes are

undesirable, when patient satisfaction has decreased, when safety issues arise, and/or when patients choose other health care organizations to obtain care.

Step 2- Gather the Team

In performing and answering the SWOT analysis, all relevant stakeholders should be included.¹⁰ Stakeholders should include staff, nurses, and members of the interdisciplinary team, including physicians, nurse practitioners, physicians' assistants, and therapists, if applicable. In addition, consumers may provide additional insights into some areas. A varied group composition is necessary to ensure that all areas of the SWOT analysis are appropriately addressed and a proper plan for action, if needed, can be proposed. Typically, the group facilitator should be someone knowledgeable about the internal environment, have some type of authority within the department, and have expertise in management and leadership. Essentially, the facilitator could either be the ED nurse manager or an administrative/service-line executive. Initially, the facilitator should set up brainstorming meetings with the stakeholders, which could progress to surveys or questionnaires to appropriate groups within the emergency department. The facilitator should gather the necessary materials to ensure that productive brainstorming meetings occur. The materials needed should include an appropriately sized meeting room, either a large white board or a computer with projector capabilities, collected and reported data that initiated the need for the analysis, paper, writing utensils, and a meeting agenda.

The facilitator should anticipate the stages in the group and team development model that will occur during initial and subsequent SWOT analysis meetings with stakeholders; as time progresses, the meetings will be more productive, and the team more effective.¹¹ Stages in the group and team development model include forming, storming, norming, performing, and adjourning¹¹ (Table 2). During the forming stage, the group is focused on the authority of the facilitator and becoming oriented to the team members and the specific goals. During the storming stage, personalities of group members materialize, and disagreements can occur. It is important for the facilitator to address any disagreements, else they may lead to further unproductive actions. During the norming stage, unity is achieved and group performance increases with a focus on the goals of the team. During the performing stage, the group is functioning, productive, and actively working toward meeting the goals of the team. Finally, during the adjourning stage, the majority of the goals have been obtained and documented with action plans in place, if needed. Tuckman's group development process is necessary to ensure the creation of an effective team.¹²

Step 3 –Assess the 4 Elements

Determine the intrinsic factors of strengths and weaknesses by facilitating the answers to the following questions:

- What are the department's advantages?

- What can you do better than others?

- What unique or lowest-cost services can you provide patients?

- What do patients in your market see as your department's strength?

- Upon what factors could the department improve?

- What are the patients in your market likely to see as your department's weakness?

- What lack of services loses your department's patients?

The first set of questions to ask are the following: What does the department do well? Could this department be the best trauma facility, heart program, stroke program, sepsis treatment facility, or have some other outstanding

accomplishment? The next set of questions focus on what the department's weaknesses are or what the department does not do well. The facilitator should gain as much detail as possible from all of the stakeholders, including subjective and objective data. Does the department meet all standards of care? Are there funds to make material changes in the department?

Determine the extrinsic factors of opportunities and threats by facilitating the answers to the following questions:

- What good opportunities are available in your department?

- Are there things this department can do better?

- Are there new opportunities in health care that need to be implemented?

- What do the competitors have that you need in the department?

- What problems does your department face?

- Of what are your department's competitors taking advantage?

- Does the department have administrative support if a change needs to occur?

For opportunities, are there things that this department can do better? Are there new avenues in health care that need to be implemented? What do the competitors have that is needed? Does the department have administrative support if a change needs to occur? Does the department have the financial resources/budget to implement a change? Are the department's customer service scores adequate? Does the department use current technology? Does another competitive facility—peer or model institution—surpass your department in other areas; if so, which areas? The facilitator should gain as much detail as possible from all of the stakeholders, including subjective and objective data. See ^{Table 3} for an example of a completed SWOT analysis within an emergency department.

Step 4 –Create and Prioritize an Action Plan

Once each of the 4 elements has been addressed, an action plan may be developed for improvement. Again, this may be done through group meetings. An improvement plan that employs stakeholder collaboration is more likely to succeed in the change process because it encourages cooperation.¹³ Include other departments to get feedback as well. An action plan should be disseminated to appropriate organization committees, if applicable. Once the action plan is ready, training should be performed with all necessary stakeholders before implementation; this includes other departments that these changes would affect.¹³ Stakeholder feedback should be elicited and is essential in this step to ensure that rationales for improvement are comprehended. Communication is key to keeping all stakeholders participating in the improvement process. Always compare the performance with quality and safety standards of care.¹⁴ This may be in the form of a policy/procedure or protocol. Guidelines may be reinforced if performance falls below quality and safety standards.

Implications for Emergency Nursing

In health care, change is inevitable, and improvement is necessary.¹⁵ Nurse leaders within the emergency department must stay abreast of changes and challenges that may affect the quality of care that is provided. The current literature on performing SWOT analysis as a useful tool for improvement indicates the need for ED nurse managers to take inventory of their unit and complete a SWOT analysis to improve quality, safety, or new services as needed. Through the utilization of SWOT analysis, review of the information, and implementation of an action plan, the ED nurse manager can establish improvement processes that can directly affect the producers and consumers of health care within the department. Key implications for emergency nursing practice include educating

nurse managers on their ability to assess SWOT of their department for improvement and create an action plan.

Conclusion

Many health care facilities rely on educated nurse leaders to make the organization optimal. Utilizing all tools at the manager's disposal, the ED nurse manager may improve the quality, safety, and strengths of the department and be cautiously aware of the potential risks. By using evidenced-based practice tools such as SWOT analysis and collaboration with stakeholders, an ED nurse manager can turn a failing department into a superior powerhouse.

<p>S: Strengths (internal facilitators)•What are the department's advantages?•What can you do better than others?•What unique or lowest-cost services can you provide patients?•What do patients in your market see as your department's strength?</p>	<p>W: Weaknesses (internal barriers)•Upon what factors could the department improve to meet customer needs and challenge outside competitors?•What are patients in your market likely to see as your department's weaknesses?•What lack of services loses your department's patients?</p>
<p>O: Opportunities (external facilitators)•What good opportunities are available to your department?•Are there things this department can do better?•Are there new opportunities in health care that need to be implemented?•Does the department have administrative support if a change needs to occur?•Does the department have financial resources/budget to implement a change?•Is the department's customer service score adequate?•Does the department use current technology?</p>	<p>T: Threats (external barriers)•What problems does your department face regarding competitors?•Of what are your department's competitors taking advantage?•Does another competitive facility surpass your department in the following areas:◦financial◦quality services◦new services◦cleanliness◦staffing◦designations (Magnet)◦physicians◦customers•What do the competitors have that you need in the department?</p>

<p>Stage 1: forming</p>	<p>Goals and roles of members are unclear; facilitator guidance is needed along with orientation.</p>
<p>Stage 2: storming</p>	<p>Conflict occurs among the group members; understanding who is in power is needed; mentoring from facilitator is needed.</p>
<p>Stage 3: norming</p>	<p>Unity is enhanced, and group members are working toward common goals.</p>
<p>Stage 4: performing</p>	<p>Group members are functioning and focusing on goal achievement.</p>
<p>Stage 5: adjourning</p>	<p>Majority of goals have been attained and documented, and an action plan has been formulated.</p>

<p>S: Strengths (internal facilitators)•Volume: 69,000 patient visits per year•Trauma II designation•Regional referral facility•Ninetieth percentile in patient satisfaction•Ninetieth percentile in employee satisfaction•Physician coverage in all disciplines•Cardiac referral center</p>	<p>W: Weaknesses (internal barriers)•Decreased financial reimbursement because of falling quality improvement scores r/t trauma•No neurosurgical coverage on the weekend with current group. Trauma II designation cannot be increased to Level I because of coverage.•No stroke protocol/ stroke designation in place (as recommended by AHA)</p>
<p>O: Opportunities (external facilitators)•XYZ Hospital has 24-hour neurosurgical services coverage•XYZ Hospital door to doctor times at 10 minutes as recommended by ESI</p>	<p>T: Threats (external barriers)•XYZ Hospital 10 miles away is a Stroke designated facility—possible loss of 1,000 patients per year•XYZ Hospital is a magnet hospital—attracts 100 new seasoned nurses per year•XYZ Hospital has an increased reimbursement for high quality indicators according to Joint Commission</p>

DETAILS

Subject:	SWOT analysis; Emergency medical care; Analysis; Strategic management; Managers; Therapists; Facilitators; Physicians; Nurses; Nurse practitioners; Strategic planning; Patient satisfaction; Stakeholders; Clinical outcomes; Health care; Organizational environment; Brainstorms; Brainstorming; Meetings; Interdisciplinary aspects; Departments; Administrative support; Emergency services; Objectives
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Forensics and Emergency Nursing: JEN

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ABSTRACT (ENGLISH)

[...] will outline strategies that enabled me to empower patients, families, the community, nurses, law enforcement, legal agencies, emergency services, and legislature. Emergency Department Nurses Association Then, ENA Now I have been a member of the Emergency Nurses Association (ENA) since 1979, the early years of the ENA, shortly after Judith Kelleher and Anita Dorr founded the Emergency Department Nurses Association (EDNA) in 1970. Forensic science considerations are especially important during care of patients in the emergency department who are persons under law enforcement custody or rape survivors, or are involved in interpersonal violence, intimate partner violence, human trafficking, near strangulations, evidence collection, injury description, medicolegal documentation, death investigations, handling of biological evidence, mass disasters, and community crises.1 I can share 2 examples of women who presented to the emergency department triage with the chief complaint of dizziness. Every emergency nurse must recognize the signs and symptoms of violence, and take action to stop the cycle of violence.1-6 Forensic nurses can be defined as health care professionals who perform in partnership with law enforcement during emergency care for individuals who are in the custody of the law or who may be involved in situations where nurses are mandated reporters.1 Federal and state laws regulate mandated reporters. When you care for patients who are still alive and whose care crosses medicine and the legal system, you are involved in living forensics.8 Living forensics is the forensic science associated with the legal cases involving living victims.8 Emergency nurses interface with patients associated with living forensics during care of patients living with addictions, alcohol misuse, drug misuse, behavioral health conditions, intimate partner violence, interpersonal

violence, child abuse, incest, sexual abuse, sexual assaults, rape, human trafficking, elder abuse, disabled persons' abuse, neglect, drug tampering, poisoning, medical malpractice, nonfatal assaults, and motor vehicle crashes with and without pedestrian involvement.⁸ Any abuse while a person is in the custody of law enforcement and correctional facilities is considered a living forensics situation.⁸ How Should Emergency Nurses Provide Forensic Care?

FULL TEXT

This Guest Editorial links my own career path with the intersection of forensics and emergency nursing. Advocacy for vulnerable patients affected by interpersonal violence has been a priority throughout my emergency career. I am an emergency nurse who applies forensic concepts at each patient encounter. Emergency nurses should consider forensic science concepts during patient care. For example, subtle chief complaint symptoms can actually be symptoms of interpersonal violence. In the following paragraphs I will share personal, impactful, and advocacy episodes in my emergency nursing career that have influenced me. Understanding the intersection of emergency nursing and forensic science is a complex issue. I will try to unravel the hidden vulnerabilities in an organized format: whom we should suspect; why emergency nurses should care; how emergency nurses should provide care; and when and where forensic science intersects with emergency care. In addition, I will outline strategies that enabled me to empower patients, families, the community, nurses, law enforcement, legal agencies, emergency services, and legislature.

Emergency Department Nurses Association Then, ENA Now

I have been a member of the Emergency Nurses Association (ENA) since 1979, the early years of the ENA, shortly after Judith Kelleher and Anita Dorr founded the Emergency Department Nurses Association (EDNA) in 1970. The ENA at that time offered the EDNA training course, where I learned and applied emergency nursing forensic concepts. In addition to the EDNA training, my first emergency nurse manager, Frances McDonough, RN, and charge nurse, Kitty Gerow, RN, provided comprehensive emergency nursing training that included medicolegal considerations and accurate documentation during emergency care. McDonough and Gerow took me to my first Beacon EDNA Chapter meeting in Lowell, Massachusetts, where I still remain a member.

To Whom Should Emergency Nurses Apply Forensic Science Considerations?

Emergency nurses should apply forensic science considerations to all patients in the emergency department. Patients across life span can be involved in hidden interpersonal violence situations. Forensic nursing concepts apply to victims of all ages who have been traumatized by interpersonal violence, child abuse, child neglect, elder abuse, and elder neglect, as well as people with developmental disabilities who have been abused and exploited.¹ In addition, the forms of abuse include physical, emotional, and sexual abuse, exploitation, financial (economic) abuse, neglect, and abandonment. Forensic science considerations are especially important during care of patients in the emergency department who are persons under law enforcement custody or rape survivors, or are involved in interpersonal violence, intimate partner violence, human trafficking, near strangulations, evidence collection, injury description, medicolegal documentation, death investigations, handling of biological evidence, mass disasters, and community crises.¹

I can share 2 examples of women who presented to the emergency department triage with the chief complaint of dizziness. One was 25 years old and the other 48 years old; the 2 women came into the emergency department on different days with the chief complaint of dizziness for a couple of days. Fortunately, I was their triage nurse; while I was performing triage, their stories did not make sense. The red flags that alerted me that interpersonal violence may be involved included the following: both had a delay in seeking care; both were healthy; there was no visible bruising and no explainable reason, such as dehydration or low blood sugar, for dizziness; and both women lived far away and avoided many closer hospitals to seek emergency care. When I applied trauma-informed forensic interview strategies, which include gentle inquiry regarding past injury, both denied any injury. On further questioning in triage, both reported being hit on the head by their husbands; one had a cell phone thrown at the back of her head, and the other was hit on the back of her head in an area covered by hair so that any injury would not be

visible. Each patient agreed when offered the opportunity to talk to our social services regarding their situation and to develop a safety plan. These are 2 examples of how emergency nurses who understand and apply forensic science are in a critical position to recognize hidden patients affected by interpersonal violence. Every emergency nurse must recognize the signs and symptoms of violence, and take action to stop the cycle of violence.¹⁻⁶ Forensic nurses can be defined as health care professionals who perform in partnership with law enforcement during emergency care for individuals who are in the custody of the law or who may be involved in situations where nurses are mandated reporters.¹ Federal and state laws regulate mandated reporters. Nurses are considered mandated reporters for cases of abuse or neglect of elders, children, and other vulnerable populations. Mandatory reporting of intimate partner violence depends on the state in which the nurse is working or resides. Emergency nurses as mandated reporters are trained to recognize the signs and symptoms of abuse or neglect and are required to report even if they only suspect abuse. Emergency nurses who incorporate medicolegal concepts during emergency care are applying forensic concepts. Forensic nursing skills are used during care of victims of abuse or trauma of all ages. Forensic nursing concepts are used during care of the patient affected by sexual assault, child abuse, elder abuse, intimate partner violence, human trafficking, strangulation, and any form of trauma, be it intentional or nonintentional.¹

Why Should Emergency Nurses Care About Forensics?

The ENA, the international organization for emergency nurses, recognizes the importance of collaboration between emergency nursing and forensic nursing. The ENA and the International Association of Forensic Nurses have collaborated to write a joint position statement on intimate partner violence that can help guide emergency nurses during patient care.⁵ Emergency nurses should care about forensics because the emergency nurse may be the first person to begin the chain of custody and evidence preservation during care of patients involved in an abuse, neglect, or trauma situation. Emergency nurses must assess injuries from a forensic viewpoint during injury description and documentation. Emergency nurses and law enforcement frequently partner during patient care. This collaboration is the forensics approach during emergency care.

Early in my emergency nursing career, I felt outrage each time I was the bedside nurse for persons in potential interpersonal violence situations. Nurses can experience secondary trauma from witnessing interpersonal violence.⁷ To prevent a feeling of powerlessness, I chose empowerment to stop this violence. Whereas some patients admitted they were in unsafe situations, and I was able to refer them to social services, others did not self-identify. Patients in interpersonal violence situations often deny abuse and have children with them who witness the violence. I empowered myself by continuing my education on forensic science to improve my care of patients in the emergency department. Another strategy I used to empower myself was mentoring emergency nurses, nursing students, medical students, health care providers, other health care personnel, social services, and law enforcement in education regarding interpersonal violence.

Personally, I recognized the need to further my education in forensics, which resulted in my going back to school for a doctorate degree in nursing to actively pursue evidence-based research in what is now known as forensic nursing. I then became a member of the Forensic Nurses Association, while continuing to maintain my ENA membership. This pursuit of forensic knowledge led me to meet Virginia Lynch, who introduced me to the coroner's office medicolegal death investigators.¹ As an emergency nurse, I did care for those requiring medicolegal death investigations, which is what led me to learn more about what is involved when you care for victims of violence who are still living. When you care for patients who are still alive and whose care crosses medicine and the legal system, you are involved in living forensics.⁸ Living forensics is the forensic science associated with the legal cases involving living victims.⁸ Emergency nurses interface with patients associated with living forensics during care of patients living with addictions, alcohol misuse, drug misuse, behavioral health conditions, intimate partner violence, interpersonal violence, child abuse, incest, sexual abuse, sexual assaults, rape, human trafficking, elder abuse, disabled persons' abuse, neglect, drug tampering, poisoning, medical malpractice, nonfatal assaults, and motor vehicle crashes with and without pedestrian involvement.⁸ Any abuse while a person is in the custody of law enforcement and correctional facilities is considered a living forensics situation.⁸

How Should Emergency Nurses Provide Forensic Care?

Emergency nurses must be trained in the collection of physical evidence when potential or known criminal acts may have occurred. Forensic evidence preservation involves the emergency nurse maintaining at all times the chain of custody of the evidence collected and accurate forensic documentation.^{1,8} Emergency nurses should apply trauma-informed care, which includes a therapeutic communication approach during care of all patients in the emergency department.¹ Emergency nurses need to look at every patient with a forensic eye to see if they are entering the emergency system seeking a safe haven from a hidden abuse or neglect situation.

When Should Emergency Nurses Apply Forensics?

Emergency nurses should apply forensics science considerations from the moment they meet a patient and family. I begin applying forensics science knowledge to across-the-room assessments of my patients. What is the person's demeanor? Who is with them? What nonverbal and verbal behaviors do I notice? Does the child or adult have good personal hygiene, look well nourished, and have good dental hygiene? If the patient is a child, are the child's immunizations up to date? Does the child have health insurance information and identification? Is the medical history available? A forensic science approach should be initiated from the beginning; that is, when the emergency nurse is taking the patient's history, physical assessment, and documentation, because the medicolegal intersection may not be apparent right away. The emergency nurse should suspect interpersonal violence and/or human trafficking if nonverbal or verbal behaviors are incongruent.^{1,9-12}

Where Should Emergency Nurses Apply Forensics?

Emergency nurses should only inquire, with a trauma-informed approach, about interpersonal violence situations in a location where the nurse is alone with the patient. The setting where they work will influence the manner in which they apply forensics. In addition, where they work will guide the policies and procedures for mandated reporting laws.

Testimony During Rape Trial

When caring for a possible rape survivor, proper forensic care, maintaining the chain of custody, and documentation are critical for both the immediate care of the patient and the successful prosecution of the perpetrator.¹ Keeping in mind that the trial of a defendant in a rape case may take place 1 to 2 years after the event, any statements that the patient makes, as well as the patient's physical and emotional appearance, must be documented. As a staff nurse, I cared for hundreds of rape survivors. I was the emergency nurse for 1 rape case that went to trial, and I testified regarding the rape. In 1992, I provided evidence testimony regarding the care of this rape survivor. When I was this patient's emergency nurse, I immediately followed the best practices for the care of a patient who is a potential victim of a rape, which included accurate medicolegal documentation and application of chain of custody with evidence. I stayed with the patient for the entire course of the treatment from triage to discharge. The rape case has been documented in *Commonwealth vs Licata*, 412 Mass. 654 (1992). My testimony was allowed under a "fresh complaint" doctrine, demonstrating the importance of nursing forensics assessment, planning, interventions, evaluation, and documentation during the emergency care of a rape survivor. A fresh complaint is the disclosure by the victim to a third party regarding the sexual assault. The third party is the first person to whom the victim of a sexual assault discloses the facts of the assault. The court testimony can be accessed at <http://masscases.com/cases/sjc/412/412mass654.html>.

First Responder Domestic Violence Training

My passion for the advocacy of patients in domestic violence situations led my name to become known among victim advocates in my local area. This led to a request by the Middlesex County Victim Advocates office in 2008 to help organize a conference to educate local law enforcement personnel, emergency medical services staff, and law professionals on how to respond to domestic violence situations. Law enforcement personnel, emergency medical services staff, and first responders were encountering many cases of domestic violence. The Middlesex County District Attorney's office had recognized a knowledge gap in the identification and care of patients affected by domestic violence by first responders and law enforcement. I accepted that responsibility and volunteered more than 100 hours as an emergency nurse to collaboratively organize and facilitate the "First Responder Domestic Violence

Training” conference at Saint John’s Hospital in Lowell, Massachusetts, in 2008. Brigham & Women’s Hospital (where I work per diem) agreed to offer 5 free contact hours for nurses. St. John’s Hospital offered a free conference room, free lunch for all who attended, and free pens and writing pads. It was an exciting conference: prosecutors, victim advocates, police, emergency medical services staff, first responders, firefighters, federal forensic agents, and nurses collaboratively presented a roundtable, discussing the best practices for care of the patient affected by domestic violence. This free educational offering was well received by more than 50 attendees.

See, Pull, Cut the Threads of Violence

Organizing the “First Responder Domestic Violence Training” conference motivated me to go back to school for my doctorate to try and stop this cycle of violence. The emergency departments where I worked had many cases of patients affected by domestic violence. I came across a case that motivated me to become active in intimate partner violence research when I was working as the triage nurse on the evening shift in the emergency department. A mother ran into the emergency department holding her 3-month-old child, who, she said, was not well. It was an extremely cold, snowy winter night. I looked at the child sleeping comfortably in the mother’s arms, her color pink, body well developed, skin warm and dry, vital signs normal, dressed warmly, and in no distress. When I looked at the mother, she looked distressed, with her hair disheveled, and anxious. I started a gentle inquiry by asking the mother if this was her first child; she said no, this was her third. I asked her if this child or the other children had been sick, she said no. The presentation of a mother of 3 children coming out to the emergency department late on a cold winter night, carrying a well-looking infant, was a red flag for me regarding her safety. I asked myself what the best approach was to asking the mother of a child being seen in the emergency department if she was involved in an intimate partner violence situation? Because I was the triage nurse, I brought the child directly to the room to see the doctor. The mother was very upset, so I chose to bring the child to the room to validate her concern regarding her child rather than asking about her safety first. I had learned, after conducting my doctoral research, that this was the correct approach. The presentation was very subtle except for the mother’s behavior and appearance. This occurred in Massachusetts where mandated reporters do not have to report intimate partner violence. Privately, I shared my concern and asked the doctor to inquire. He did not agree. The child was discharged without the mother being screened for safety. The lesson learned from this interaction was that if the symptoms of intimate partner violence are very subtle, emergency nurses should not leave the inquiry to anyone else but complete it themselves after the child is treated. It became my lifelong mission as an emergency nurse to ensure that all patients, including mothers of children brought to the emergency department, were screened for intimate partner violence and offered services, including safety plan and resources, if needed. The lessons learned from this case triggered my quest to identify an evidence-based approach, during my doctoral research, to determine the best way to screen mothers of children brought to the emergency department for care.

At that time, I applied to Regis College in Weston, Massachusetts, for my Doctorate of Nursing Practice. My area of interest was domestic violence, which has since evolved to become known as intimate partner violence. There I developed the “See, Pull, Cut the Threads of Violence”¹⁰ format, which was the focus of my doctoral research. “See” represents the emergency nurses’ need to recognize hidden signs and symptoms of intimate partner violence. “Pull” represents the trauma-informed approach and therapeutic communication strategies that are important to find out if patients are involved in intimate partner violence situations. “Cut” represents stopping the cycle of violence by offering the person resources as well as a safety plan, and active engagement by emergency nurses in proposing legislative bills to stop intimate partner violence in the community. While doing my doctoral studies, I found a gap in research on the screening of mothers of children who come to the emergency department by health care providers to see if they are involved in an intimate partner violence situation. Pediatric health care providers were not screening the mothers of patients who came to the emergency department for care, which resulted in a missed opportunity to screen for intimate partner violence. During my doctoral education, I had taken a Health Care Policy course that involved learning how to advocate for patients by legislative involvement. The Health Policy class required our going to the Massachusetts State House and learning how legislative bills were created to advocate for health care policies. During this class we became informed about the role of lobbyists and the legislative process,

which must be understood if people want change to occur in their area of interest. I loved learning about health care policy. I realized that if nurses were not active in the legislative process as public and patient advocates, then change would not occur. This motivated me to submit a legislative bill, which took many months of investigating which bills being submitted to the Massachusetts House of Representatives at the time were similar to my proposed bill. Support from legislative voting members is recommended to support any bill proposal. This information guided my decision to write a bill in collaboration with legal advice on increasing penalties imposed on repeat domestic violence perpetrators. Collaboration with my local legislator helped me prepare for my testimony at the Massachusetts State House. This involved development of a fact sheet on domestic violence to give to voting members in the Massachusetts House of Representatives to gain support of my bill proposal. After submission of the bill, I was asked to testify on the bill proposal of increasing the penalties imposed on repeat domestic violence offenders. This bill was cosponsored by 26 Massachusetts State Representatives as House Bill 4527 in 2010. A comprehensive violence bill that was passed years later included aspects of my proposal. Emergency nurses need to understand that empowerment stems from active involvement in the legislative process in the area that needs change. I would advise emergency nurses to take a health care policy class to educate themselves on the legislative process, and go to their local state house to learn how to submit a legislative bill.

Remaining at the Bedside

The experience of being a bedside nurse involved in the legislative process to try to establish laws to protect the survivors of domestic violence fueled my desire to stay at the bedside even more. Bedside nurses who have a doctorate can be the most powerful advocates for those being taking advantage of by perpetrators of violence. Since receiving my doctorate, I have taught at several universities, and I remain at the bedside. Frequently I am asked, and personally reflect on, how important it is that I stay at the bedside. It would be much easier for me to move away from the bedside, which would allow for a better schedule, enable me to meet my needs first, and give me more authority in a hospital, as well as give me control of my life, and, definitely, a higher income. For me, being a bedside emergency nurse is very important. Emergency nurses who have a doctorate are exactly the emergency nurses I want taking care of my family, friends, and patients. The advanced degree emergency nurse applies additional critical thinking skills as well as evidence-based research during each patient encounter, which provides emergency care of the highest caliber. My patients and their families are appreciative of my empowering them with an explanation of their emergency care choices.

ENA Certifications and Involvement

Along with recognizing the importance of staying at the bedside, I realized early in my career that it was important to obtain certifications in emergency nursing. I have maintained certifications in multiple areas (CEN, CPN, and CPEN), and I volunteer with the ENA at the local, state, and national levels to promote emergency nursing excellence. I take pride as a mentor of emergency nurses, medical and physician assistants, emergency medical technicians, and paramedic students. I was a contributing author for Trauma Nursing Core Course, eighth edition (2020), Chapter 16: "Special Populations: The Interpersonal-Violence Trauma Patient."¹³ I was a contributing author and content reviewer for Emergency Nursing Pediatric Course, fifth edition (2020).¹⁴ My pediatric knowledge, clinical expertise, and evidence-based research practice have been valuable throughout my emergency nursing career. As an ENA volunteer I have been an item writer for the CEN exam for 10 years and part of the first CPEN exam writing. My current active ENA involvement includes being a Trauma Nursing Core Course instructor and Emergency Nursing Pediatric Course instructor. At the ENA 2017 National Convention in St Louis, Missouri, I gave an intimate partner violence presentation titled "See, Pull, Cut the Threads of Violence."

Active ENA involvement since 1979 led to my ultimate ENA honor, in 2018, when I became a Fellow of the Academy of Emergency Nursing. After receiving my Fellowship, I felt empowered to make a difference through research. In the fall of 2018, I applied for and received the ENA 2018 Foundation Seed Research Grant. I am eternally thankful to the ENA Foundation for this grant, which helped support my development of an online human trafficking educational module for emergency nurses, titled "See, Pull, Cut the Threads of Violence." This module includes comparisons of intimate partner violence and human trafficking so that emergency nurses can identify (See) and provide trauma-

informed communication to obtain abuse information (Pull). In addition, the module supplies emergency nurses with many resources at the local, state, and national levels for referral (Cut the Threads of Violence). My passion to empower the survivors of intimate partner violence led me to learn years ago that human trafficking actually frequently interfaces with intimate partner violence. This knowledge guided me to include in my research education of emergency nurses to recognize human trafficking. With the support of the ENA 2018 Foundation Seed Research Grant, the first 5 emergency nurses who participated received a gift card, and every nurse who completed the module received 1 free nursing contact hour. I feel immense gratitude and thankfulness to the Sigma Theta Tau International, Theta Chapter, who awarded me their 2019 research grant, which allowed me to replicate and expand my human trafficking research to include education of all health care professionals.

Empowerment of Emergency Nurses Through Knowledge Dissemination

Now along comes another opportunity for me to volunteer in the ENA through the *Journal of Emergency Nursing*. Since 2014, I have been the *Journal of Emergency Nursing* Pediatric Update Section Editor with the support of Dr Anne Manton and, from 2019, Dr Jessica Castner. Writing and mentoring others to write is my passion and source of enjoyment.^{9-12,14} Many of my published articles are related to forensics.^{10-12,14} I am grateful to have been invited by Dr Meredith Scannell to coauthor the chapter on "Interpersonal Violence" in the book, *Fast Facts About Forensic Nursing*.⁹ In January 2020, I was offered, and I accepted, the newly developed Clinical Editor position at the *Journal of Emergency Nursing*, while retaining my Pediatric Update Section Editor position.

Maintaining Emergency Nursing Resilience

Thankfully, during my 40 years in emergency nursing I have remained resilient in the face of the many difficult situations that almost made me stop being a bedside emergency nurse. Fortunately, I could not let any perpetrator harm vulnerable patients and think they could get away with it. I continue to be an active ENA member at the local, state, and national levels to advocate for patients in the emergency department. I feel blessed and fortunate for each patient in the emergency department, and their family members, who have helped me to continue to grow as an emergency nurse and a person. As I embark on an exciting additional journey as the *Journal of Emergency Nursing* Clinical Editor along with continuing my bedside emergency nursing and my mentoring, my quest for emergency nursing excellence is unending. I encourage each reader to feel empowered by my offer to mentor emergency nurses to publish their evidence-based case studies for the advancement of emergency nursing knowledge. All emergency nurses must understand that knowledge is power that can be obtained by attending educational offerings, studying to obtain emergency certifications, and advancing their education in emergency and forensic nursing. I encourage nurses early in their emergency career to consider developing a collegial relationship with a seasoned nurse in their department or the local ENA chapter. Active ENA involvement will be an asset for each emergency nurse to maintain the resilience to stay at the bedside and to provide the highest quality nursing care to vulnerable persons. Emergency nurses should educate themselves in forensic sciences because it interfaces with the care of the emergency patients. Forensic science knowledge will enable the emergency nurse to advocate for patients who are in vulnerable medicolegal and interpersonal violence situations. National ENA membership is a great way to have access to free courses as well as courses offered at a discounted cost. Find your emergency nursing passion! Remember you can do it!

Emergency nurses must build their individual and collective resilience. Even after all these years, I feel personally fulfilled at the end of my shift that, hopefully, I brought comfort, emergency expertise, and caring measures to lessen someone's unfortunate situation. I wish for emergency nurses to feel passionate about themselves as professional emergency nurses who can make a difference at the bedside and in health care settings, and to feel the power to advocate for all patients in the emergency department. This year, 2020, is an exciting year to recognize the resilience of nurses Judith Kelleher, Anita Dorr, and Florence Nightingale. With 2020 being the 50th anniversary of the formation of the ENA by Kelleher and Dorr, how perfect that it is also the 200th anniversary of the birth of Florence Nightingale, the founder of modern nursing. We emergency nurses would not be where we are today without the power of our founders. Author Patricia A. Normandin in front of the Florence Nightingale Museum in London, United Kingdom.

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Increased Intravenous N-Acetylcysteine Dosing Following Massive Acetaminophen Ingestion: A Case Report: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

In the emergency department, the patient was intubated owing to altered mental status and lack of a gag reflex. Acetaminophen (APAP) is a frequently used over-the-counter analgesic and one of the most common causes of intentional and unintentional overdose leading to acute liver failure in the Western world.¹ The daily recommended dose of APAP is ≤ 4 g in a 24-hour period, and toxicity can develop if ≥ 7.5 g is acutely ingested. NAC acts to decrease the amount of the toxic metabolite formed and aids in restoring hepatic GSH by serving as a GSH precursor and substrate.^{1,2} If APAP toxicity is suspected, a blood APAP level should be checked and liver function tests (LFT) should be carried out.^{2,3} The decision to treat patients with NAC is determined by the population-based Rumack-Matthew nomogram. A massive ingestion has been defined as a single APAP intake >40 g or a blood APAP level of 300 mg/L at 4 hours after ingestion or 2 times the concentration of the treatment line on the Rumack-Matthew nomogram for a subsequent time point.^{3,6} The standard weight-based NAC treatment regimen does not take into account the dose of APAP ingested or higher initial blood concentrations; therefore, this regimen may be insufficient for massive ingestions.⁷ Extending the duration of treatment and using higher doses of NAC may be necessary in cases of massive ingestion. The administration of an additional NAC bolus or extending the 16-hour infusion may also be appropriate with a persistently elevated blood APAP level.⁹ When increasing the dose or duration of IV NAC, clinicians must use caution to prevent dosing, compounding, or administration errors and avoid massive doses of IV NAC that have been associated with adverse drug reactions.^{10,11} The American College of Medical Toxicology recommended discontinuing NAC treatment when the APAP concentration is undetectable, and there are improving LFT and prognostic markers.

FULL TEXT

DETAILS

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Document 5 of 21

Efficacy of SANE Evidence Collection: A Minnesota Study: JEN

ABSTRACT (ENGLISH)

To date the evidence supporting the utility of this model, although persuasive, is primarily anecdotal and testimonial. Evidence of SANE Efficacy Currently Available We know from the existing literature that the use of a SANE speeds up the evidentiary examination process by shortening the time a victim may have to wait for a physician to be available to complete the examination in a busy emergency department, and by shortening the time to complete the examination, because it is being done by an experienced nurse examiner.^{2,3} Not only are SANEs doing the examinations in less time, but we expect that the quality is improved because a trained, experienced SANE knows what evidence to collect and how to meet the crisis intervention needs of the survivor.⁴ The literature also indicates that prosecutors are obtaining increased numbers of guilty pleas from offenders. [...]she is a more willing witness than the physician who happened to have been on duty when the rape survivor was seen, but who has very little experience or expertise in this specialized area of practice.^{2,6} Another indication of the credibility of the SANE in the courtroom is the fact that her testimony alone is sufficient. The completed checklists were sent to SARS by the BCA for tabulation. Results Of the 97 kits analyzed, 24 were completed by SANEs from SARS in Minneapolis. Because SARS is currently the only SANE program in the state of Minnesota, it was assumed that the remaining rape kits were completed by a non-SANE. On another 8 kits this information was completely illegible. [...]for a total of 13 kits it was impossible to identify the person who collected the evidence and it would also be impossible to use this evidence in a court of law.

FULL TEXT

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The first sexual assault nurse examiner (SANE) programs were developed in Memphis, Tennessee (1976), Minneapolis, Minnesota (1977), and Amarillo, Texas (1979). These programs were developed and worked in isolation from each other until the mid-1980s when they began to publish their work. This began a collaborative relationship between existing SANE programs and with other nurses interested in developing similar programs. In 1992, after a national listing of SANE programs appeared in the *Journal of Emergency Nursing*,¹ 31 programs were represented at the first national meeting of SANEs held in Minneapolis, sponsored by the Sexual Assault Resource Service (SARS) and the University of Minnesota, School of Nursing. It was after that meeting, where the International Association of Forensic Nurses (IAFN) was founded, that the development of SANE programs throughout the United States and Canada began to proliferate.

Today there are more than 80 existing SANE programs and literally dozens of nurses in cities across the country attempting to develop SANE programs. With this proliferation of development comes the need for quantitative data on the efficacy of the SANE model. To date the evidence supporting the utility of this model, although persuasive, is primarily anecdotal and testimonial.

Evidence of SANE Efficacy Currently Available

We know from the existing literature that the use of a SANE speeds up the evidentiary examination process by shortening the time a victim may have to wait for a physician to be available to complete the examination in a busy emergency department, and by shortening the time to complete the examination, because it is being done by an experienced nurse examiner.^{2,3} Not only are SANEs doing the examinations in less time, but we expect that the quality is improved because a trained, experienced SANE knows what evidence to collect and how to meet the crisis intervention needs of the survivor.⁴

The literature also indicates that prosecutors are obtaining increased numbers of guilty pleas from offenders. They

attribute this to the more thorough examination completed by the SANE, resulting in better evidence collection, especially evidence of force.³ The director of a Wisconsin SANE program reported that during a three-and-a-half year period, they had a 100% conviction rate in cases where a SANE testified at trial.⁵ She attributed this to the quality of evidence collected and the knowledgeable testimony of the SANE.

Prosecuting attorneys who were initially concerned that the SANEs would not be as credible witnesses in court as physicians were quickly won over and the literature reports their satisfaction with the use of the SANE. Not only does the testimony of the SANE hold up well in court, but the SANE considers testifying a part of her job. As a result, she is a more willing witness than the physician who happened to have been on duty when the rape survivor was seen, but who has very little experience or expertise in this specialized area of practice.^{2,6}

Another indication of the credibility of the SANE in the courtroom is the fact that her testimony alone is sufficient. A common concern of physicians turning the examination of sexual assault survivors over to the SANE is that they will still be called to testify in court. In the now thousands of cases in which the examination was completed by the SANE in Minneapolis, there has not been one case in which the nurse's testimony alone was not sufficient and the prosecutor also subpoenaed the emergency physician.⁷

Also persuasive is quantifiable patient satisfaction information collected from SANE program patients. The Memphis SANE program mailed satisfaction questionnaires to 201 patients 2 weeks after their initial visit. The 33 survivors (16.4%) who returned the questionnaire were 93% satisfied with the care they had received.⁸ The Minneapolis SANE program has periodically conducted patient satisfaction surveys in conjunction with other studies of treatment outcome. The most recent study asked 34 patients to rate their satisfaction with the care they received by the police, hospital staff, and SANE on a 5-point Likert scale. Of the 29 survivors (85%) who responded, they rated their satisfaction with the police 3.4, with the hospital staff 4.0, and with the SANE 4.4.⁹

Methods

Recognizing the need for more factual data on the efficacy of SANE-completed evidentiary exams, the SARS, a SANE program based at Hennepin County Medical Center in Minneapolis, decided to ask the Minnesota Bureau of Criminal Apprehension (BCA) to complete an audit of 100 rape kits sent to their laboratory for analysis.

In the mid-1970s, Minnesota BCA worked closely with Hennepin County Medical Center in Minneapolis to develop a standardized rape examination kit that is now used throughout the state of Minnesota. It is provided to health care institutions and individuals free of charge by the BCA. Local police and the State Patrol also have a supply of these rape kits available for community use.

SARS worked with BCA laboratory personnel to develop a checklist to evaluate each kit for completeness of the specimens collected, documentation, and maintenance of chain of custody. The checklist asked for information such as: Who completed the kit: SANE, physician, or another nurse? Was the kit properly sealed with evidence tape? Were the appropriate swabs collected to match the documented orifices involved in the assault? Was the source identified for miscellaneous or skin swabs? Was the blood stain evidence collected properly? If clothing was obtained as evidence, was it properly placed in separate paper bags, sealed, and labeled? Was the documentation complete, including information such as last consensual coitus, number of assailants, and location of assault? The BCA began analyzing kits in February 1996 and completed 97 kits in October 1996. The completed checklists were sent to SARS by the BCA for tabulation.

Results

Of the 97 kits analyzed, 24 were completed by SANEs from SARS in Minneapolis. Because SARS is currently the only SANE program in the state of Minnesota, it was assumed that the remaining rape kits were completed by a non-SANE. Of the remaining 73 kits, 5 gave no name, title or institution, so it is impossible to know who collected the

evidence in the kit. On another 8 kits this information was completely illegible. Thus for a total of 13 kits it was impossible to identify the person who collected the evidence and it would also be impossible to use this evidence in a court of law. Of the remaining 60 kits, 30 were signed by a physician alone, suggesting the physician collected the complete evidence; 23 were signed by both a physician and a registered nurse, indicating they had both been involved in the evidence collection; and 7 had only the signatures of a nurse.

Chain of Evidence

The chain of evidence was most seriously broken in the 13 kits where there was no identification of the examiner anywhere inside the kit or on the outside of the box used for chain of evidence. In the non-SANE kits, information on chain of evidence was also present on the outside of the box in 73% (N = 53) of the kits. It was documented in 100% (N = 24) of the SANE cases. Ninety-seven percent (N = 71) of the non-SANE kits and 100% (N = 24) of the SANE kits were properly sealed. Clothing was properly stored in separate paper bags, sealed and labeled in 88% (N = 64) of the non-SANE kits and in 100% (N = 24) of the SANE cases.

The police properly completed the chain-of-evidence record on the kit 74% (N = 54) of the time on non-SANE kits, and 71% (N = 17) of the time on SANE kits. In most instances the kits are left in a locked refrigerator for the police or their representative to pick up after the examinations are completed; therefore the individual completing the examination has no control over this aspect of maintaining chain of evidence.

Unfortunately, all breaches in chain of evidence make it impossible to use the evidence collected in court, even if the correct evidence was collected and if the results were positive.

Completeness of Evidence Collected

Comparing the SANE kits with the other kits for completeness of evidence, we found 96% (N = 23) of the SANE kits and 85% (N = 62) of the non-SANE kits collected the correct swabs to match the recorded orifice of penetration. Ninety-three percent of the non-SANE kits (N = 68), and 100% (N = 24) of the SANE kits contained blood for blood type identification. Ninety-two percent (N = 22) of the SANE kits contained an extra tube of blood for blood alcohol and/or drug analysis, and only 15% (N = 12) of the non-SANE kits contained this second tube of blood. The blood stain card was prepared properly in 100% (N = 24) of the SANE kits and 81% (N = 59) of the non-SANE kits.

Documentation

The source for miscellaneous swabs was identified in 100% of the SANE kits and 96% (N = 70) of the non-SANE kits. The proper documentation was included with the kit in 100% of the SANE kits and 79% (N = 58) of the non-SANE kits. A synopsis of the assault was recorded including location of the assault in 68% (N = 50) of the non-SANE kits and 71% (N = 17) of the SANE kits. Orifices involved were recorded in 100% of the SANE kits and 77% (N = 56) of the non-SANE kits. The number of assailants was reported in 92% (N = 22) of the SANE kits and 74% (N = 54) of the non-SANE kits.

Discussion

The SANE kits are significantly more complete and better documented. They maintained the proper chain of evidence more consistently than kits completed by other nurses or physicians. In addition, the errors made by SANEs were in no instance major errors that would threaten the integrity of the evidence collected. Unfortunately, 13 kits (18%) collected by non-SANEs would not be admissible in court. This supports the expectations⁴ that SANEs will collect better evidence as a result of their experience and training. Because of our review of kits in studies such as this one, the SANE is also in a better position to learn from her mistakes and to take corrective action. For example, before this study we were not aware of the importance of documentation of the assault location (e.g., indoors versus outdoors) for the BCA records. Although we still recorded that information in our synopsis of the assault more often than non-SANE programs, we did not consistently do so. We will, however, do so in the future.

Studies such as ours that document the results of the evidence collected are an important step toward more effectively documenting the efficacy of the SANE model. Those of us who remember the quality of service delivery before the implementation of the SANE model have no doubt about the benefits, but this primarily anecdotal and testimonial evidence alone no longer is sufficient. Nurses attempting to develop new programs need facts and quantitative evidence of the efficacy of the SANE evidence collection model to support their efforts.

DETAILS

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Report and Prevent: A Quality Improvement Project to Protect Nurses From Violence in the Emergency Department: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

Introduction

Most nurses experience some form of workplace violence resulting in a stressful work environment, employee injury, and turnover. The aims of this project were to develop and evaluate strategies to improve the reporting of workplace violence as well as to empower emergency nurses to prevent assaults and protect themselves.

Methods

This quality improvement project had 2 phases. The phase I educational intervention focused on the importance of reporting workplace violence. Pre- and postintervention surveys measured experiences with workplace violence and reporting. The phase II educational intervention focused on de-escalation and self-protection strategies, training, safety, confidence, and emergency nurses' preparedness to defend themselves. Responses were analyzed using Wilcoxon signed-rank and McNemar tests.

Results

Twenty-five emergency nurses participated in phase I, with >90% reporting that they had been assaulted in the past month. Most did not report a workplace assault, which was unchanged after the intervention. Thirty-four emergency nurses participated in phase II, with a postintervention increase reported in the perceived helpfulness of learning self-protection techniques for the emergency nurses' work life ($Z = -2.179$, $P = 0.029$).

Discussion

This study was consistent with the literature in that emergency nurses often do not report workplace assaults. Most of the emergency nurses surveyed had been assaulted. Although the educational interventions did not achieve the desired outcome, it is clear that additional interventions for individual nurses and institutions need to be developed and refined to increase reporting and prevent workplace assaults.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on workplace violence indicates that emergency nurses often do not report instances of workplace violence.
- This article contributes the finding that although emergency nurses still do not routinely report instances of workplace violence, they do feel better prepared to de-escalate a potentially violent patient and protect themselves after education intervention.
- Key implications for emergency nursing practice found in this article are that hospital administrators must take steps to protect emergency nurses and other health care workers in the workplace.

Introduction

Violence against health care workers is prevalent in today's society. One study showed that 2,098 of 5,385 workers experienced 1,180 physical assaults, 2,260 physical threats, and 5,576 incidents of verbal abuse.¹ In a study done in 2014, 5,000 nurses were surveyed, and 76% reported that they had experienced some form of violence within the previous year. Emergency nurses experienced 12.1% more violent incidents than nurses in other settings.² A 2015 research study found that 88% of the nurses did not document a formal complaint after an altercation with a patient, but if the nurse was injured, or missed work because of the incident, he/she was more likely to document it formally.³ In addition, workplace violence has been shown to have negative effects on a nurse's psychological health and productivity.⁴

A review of the available evidence reveals several themes regarding violence against nurses and other health care workers, including loss of workdays owing to injury, obstacles to violence prevention, and lack of reporting.¹⁻⁴

Furthermore, it has been reported that a substantial number of patients who commit violence against nurses have mental health issues, specifically in the emergency department and/or psychiatric settings. These settings need especially strong leadership to reduce violence effectively.⁵ To overcome these obstacles, nurses, providers, administrators, state and federal legislators, and law enforcement officials need to track accurately the assaults against nurses and other health care workers and work together to eliminate or reduce the assaults. The aggression and anger from patients can stem from confusion, frustration, fear, or altered mental status, among other reasons. De-escalation techniques can and should be used first to prevent patients from becoming violent.⁶

The long-term effects of violence can include nurses resigning and/or harboring anger or negativity, as well as psychosomatic issues, hopelessness, fear, and decreased work productivity.⁴ If nurses are fearful for their safety at their workplace, their productivity and general well-being can be impacted negatively. In addition, workplace violence can be detrimental to nurses' psychological well-being and can lead to post-traumatic stress disorder (PTSD). This can result in nurses leaving their jobs, or health care entirely, which in turn leads to financial losses for them and for the facility, which then needs to hire and train new staff.⁴ According to a cross-sectional study of 3,456 emergency nurses, one-third of the nurses who had had violent altercations wanted to quit their jobs.⁷ Many nurses reported feeling helpless, isolated, and angry, experienced psychosomatic symptoms, and had lower work productivity.

Lavoie et al⁸ found that 12% of emergency nurses suffered from PTSD compared with 7% of the general population. Caregiver fatigue, stress, and injury are correlated with an increased risk of medication errors and patient infections.⁹ Workplace violence against nurses is an expensive problem for the employers. One study described a hospital that had paid out \$94,156 in charges for 30 nurses who reported that their injuries were related to workplace assaults. In addition, the study estimated that a sum of \$4.2 billion in annual charges, nationwide, was linked directly to injuries resulting from workplace violence.² The ensuing turnover in nurses results in additional costs, with the average cost to hire and train a new nurse amounting to \$27,000-\$103,000.¹⁰ Moreover, research on patient-worker violence in

the ED setting has shown that many instances of workplace aggression often go unreported.^{11,12}

In addition to reporting violent altercations, nurses are in a unique position to prevent such altercations. One model of assertive de-escalation is the LOWLINE Model.⁶ This method consists of the following steps: Listen, Offer, Wait, Look, Incline, Nod, and Express. Listening to the patient comes first. Offering reflective comments and waiting for the patient to talk are next. Then, looking at the patient and at the same time being aware of how much direct eye contact the patient needs as well as inclining the head and nodding appropriately shows that the patient is being heard.⁶ The final step consists of expressing understanding and/or empathy by using phrases such as, "That must have made you feel misunderstood."⁶ This is a well-studied tool, but tailored use is needed in the emergency department where patients tend to become aggressive quicker as well as have a shorter length of stay.⁷

Local Problem

The ED manager at the setting for this study stated that they had had increasing cases of patient-related violence toward emergency nurses. The manager was also looking for ways to intervene to bring down the number of altercations and for the staff to report when altercations did happen. According to the public safety office at this hospital, there were only 9 reported cases of staff altercations with patients in 2018.

Purpose

The purpose of this project was to improve the emergency nurses' knowledge of the importance of reporting workplace violence and to teach emergency nurses new methods for assertive de-escalation as well as self-protection. Educational strategies were implemented and evaluated to determine if there was an increase in the reporting of workplace assaults as well as an increase in the nurses' confidence in the de-escalation of patients who have the potential for violence, and confidence in their own ability to protect themselves during an actual assault.

Methods

A quasi-experimental design was used for this practice improvement project, which consisted of 2 distinct phases. The setting of the project implementation was an emergency department in a 443-bed urban hospital in the Midwestern United States. The 72-bed emergency department is a level I trauma center for adults and a level II trauma center for pediatrics. All nurses (n = 110) in the emergency department were eligible to participate in both phases of this project. Participation was voluntary and confidential. Phase I of this project (February-March 2019) focused on the emergency nurses' history, their thoughts on violent altercations, and whether they reported. Phase II of this project (June-July 2019) focused on current de-escalation training and self-protection techniques.

Phase I

The phase I intervention consisted of 6 identical 5-minute educational in-services regarding the importance of reporting violence and the ramifications of not reporting. These in-services were conducted by the project director during the nurses' 10-minute preshift huddles in March 2019. The in-services were scheduled so that nurses from all shifts would be able to attend. Reinforcement of the education was provided in the form of a poster that was left in the nurses' break room (^{Supplementary Figure 1}). The content for the educational in-service as well as the reinforcement poster was developed through a review of the literature on the reporting of workplace violence in hospitals.^{2,3,11-15}

Phase II

The phase II intervention consisted of 12 identical 5-minute educational in-services conducted by the project director during the nurses' 10-minute preshift huddles in June 2019. Again, the in-services were scheduled so that nurses from all shifts could attend. An assertive de-escalation and self-protection method, 5 Actions, was developed. The 5 actions were determined on the basis of the LOWLINE Model⁶ as well as additional literature on assertive de-escalation and prevention of workplace violence¹⁶⁻¹⁸ and in consultation with 3 emergency nurse experts to determine which actions would be most appropriate in the emergency department. This streamlined method of de-

escalation takes into consideration that patients tend to become violent quicker as well as have a shorter length of stay in the emergency department than in other areas of the hospital.⁷ 5 Actions consists of: Confrontation Tips; Be Assertive, Not Aggressive; Violence-Free Contracts; Duck & Cover; and Debriefing after an event. Reinforcement of the education was provided in the form of a poster that was left in the nurses' break room, and small posters with 5 Actions that were left at the nurses' station (Supplementary Figure 2). The content for the educational in-services as well as the reinforcement poster was developed through a review of the literature on assertive de-escalation and prevention of workplace violence.^{6,16-18}

Data Collection

The data were gathered using deidentified emailed surveys. The emergency nurses were asked to use a password recovery code to match their pre- and postsurveys. Baseline and 1-month postintervention data on the emergency nurses' history, their thoughts on violent altercations, and whether they reported them were collected in phase I. Baseline and 2-month postintervention data on their current de-escalation training, safety, confidence, and preparedness to defend themselves were collected in phase II.

The data collection tool developed for phase I was a 17-question presurvey (Supplementary Table 1) that asked the participants to provide demographic characteristics and information related to any assaults they had sustained at work in the emergency department. The postsurvey contained the same questions as the presurvey, including demographic data, to be able to match the pre- and postsurveys in the unlikely event that 2 participant password recovery codes were the same.

The data-collection tool developed for phase II was a 10-question presurvey (Supplementary Table 2) that asked the participants to provide demographic characteristics, information related to any assaults they had sustained at work in the emergency department, and information related to confidence in their ability to de-escalate an aggressive or violent encounter with a patient. The postsurvey contained the same questions as the presurvey, including demographic data to be able to match the pre- and postsurveys in the unlikely event that 2 participant password recovery codes were the same.

As a quality improvement project, this protocol was approved as exempt from review by the University of Michigan-Flint Institutional Review Board (HUM00159932, 2/21/2019).

Data Analysis Procedures

The data gathered from the surveys were examined using SPSS version 24 (IBM Corp, Armonk, NY). The responses to the ordinal level questions in the pre- and postsurveys were compared using the Wilcoxon signed-rank test to see if there was a change in median response. The responses to the other dichotomous questions in the pre- and postsurveys were compared using the McNemar test. No power analysis was completed because all eligible nurses at the site were invited to participate.

Results Phase I

In phase I, 53 participants completed the presurvey and 25 completed the 1-month postsurvey. Only the 25 paired pre- and postsurveys were included in the final analysis. The data obtained from the emergency nurses (n = 25) revealed that most of the participants were women (n = 18/72%), with 1 to 5 years of experience as emergency nurses (n = 16/64%). Age was grouped in 10-year increments, with the largest group being 31 to 40 years of age (n = 10/40%).

The pre- and postsurveys revealed that 76% (n = 19) of the emergency nurses viewed violence as "part of their job." In addition, 68% (n = 17) understood the mental and physical ramifications of not reporting violence before the education, whereas 76% (n = 19) understood the ramifications after the education.

The survey results illustrated the number of assaults against emergency nurses in the month before the presurvey

and in the month before the postsurvey (Supplementary Figure 3), if the nurse reported the assault (Supplementary Figure 4), and the reasons that they did not report (Supplementary Figure 5). In the 1 month between the phase I pre- and postsurveys, the percentage of nurses assaulted increased from 92% (n = 23) to 96% (n = 24). The surveys revealed that the top 2 reasons the nurses did not report the violence were that they felt it would not change the outcome (68% in both pre- and postsurveys) and that they saw it as part of their job (44% in the presurvey and 36% in the postsurvey).

Supplementary Figure 6 illustrates how nurses rated their confidence in reporting violent altercations on a Likert scale from 0-10, with 0 being not confident at all and 10 being very confident. The Wilcoxon signed-rank test showed that the median score increased from pre- to postsurvey, but this was not statistically significant ($Z = -1.428$, $P = 0.153$).

Phase II

In phase II, 42 participants completed the presurvey, and 34 completed the postsurvey. The 34 paired pre- and postsurveys were included in the final analysis. The data obtained from the emergency nurses (n = 34) revealed that most of the participants were women (n = 26/76.5%) and had 1 to 5 years of experience as emergency nurses (n = 13/38.2%). The presurvey revealed that 14.7% (n = 5) of the nurses had no confidence in their ability to protect themselves from an aggressive patient, 38.2% (n = 13) had medium confidence, and 2.9% (n = 1) had the highest confidence. The postsurvey, after the intervention, revealed that 11.8% (n = 4) had no confidence in their ability to protect themselves, 41.2% (n = 14) had medium confidence, and 11.8% (n = 4) had the highest confidence.

Supplementary Figure 7 illustrates the perception of the emergency nurses regarding how helpful learning self-protection techniques would be for their work life. In the presurvey, the largest group of nurses felt that the techniques would be somewhat helpful (n = 14/41.2%), whereas in the postsurvey (after the education), the largest group of nurses reported that they felt the techniques would be very helpful (n = 12/35.3%). In addition, this Likert-style question was analyzed using the Wilcoxon signed-rank test, and it was found that there was a statistically significant increase in perceived helpfulness from pre- to postsurvey ($Z = -2.179$, $P = 0.029$) (Supplementary Figure 7).

Supplementary Figure 8 illustrates how confident the nurses were that they could de-escalate an aggressive patient. Overall, in the presurvey, the largest percentage of the nurses indicated that they felt somewhat confident (n = 12/35.3%), whereas in the postsurvey (after the education), the largest percentage reported that they felt medium confidence (n = 12/35.3%). There was no significant difference between pre- and postintervention responses ($Z = -1.022$, $P = 0.271$) (Supplementary Figure 8).

Phase I and II: Reporting Workplace Violence

The data gathered showed that in phase I, the percentage of emergency nurses who did not report a violent altercation was 56% (n = 14) in the presurvey and 52% (n = 13) in the postsurvey. In phase II, the percentage of emergency nurses who did not report a violent altercation was 55.9% (n = 19) in the presurvey and 44.1% (n = 15) in the postsurvey. The percentage of nurses who did not report every time they were involved in a violent altercation was 84% (n = 21) in the phase I presurvey and 80% (n = 20) in the phase I postsurvey. The analysis of the nurses' confidence in their future reporting did not show a significant difference, but with regard to reporting violent altercations, "having medium confidence" increased from 24% to 28%, and "being very confident" increased from 12% to 16%.

Discussion

The purpose of this project was to increase reporting of workplace violence by emergency nurses as well as to teach emergency nurses new methods for assertive de-escalation as well as self-protection. Although the reporting of workplace assaults did not increase after the educational intervention, this project does add to the literature related to the prevention of workplace violence. The literature shows that 88% of nurses do not report violent altercations.¹ This study was consistent with the literature and corroborates the evidence on the pervasive and intractable nature

of workplace violence, and the need for the development and testing of additional interventions related to the prevention of workplace assaults in the emergency department.

The participants responded that the main barriers to reporting were that it would not change the outcome and that they thought that violence was “part of their job.” The participants felt that there was a lack of support for reporting workplace violence, and they were skeptical that reporting workplace violence would result in any change in the outcomes. With nearly all emergency nurses surveyed reporting that they had been assaulted, administrators need to take notice and implement an accessible method for emergency nurses to report these altercations. Only then can the root causes be analyzed and appropriate strategies be undertaken to protect nurses.

The phase II pre- and postsurveys showed a statistically significant change regarding the nurses’ thoughts on the need for self-protection techniques. The nurses who participated in both surveys and listened to and/or participated in the interventions saw value in learning ways to protect themselves. This finding is clinically relevant because all but 1 of the nurses reported being assaulted at work during the past month in phase I (Supplementary Figure 3). Furthermore, the analysis showed that the nurses’ confidence in their future reporting increased, although the increase was not statistically significant. In addition, a single 5-minute intervention may not have been adequate to produce the desired change in behavior. This could indicate a lack of “dose effect” even with the reinforcements provided to the participants. Still, administrators could use this data point to continue to increase nurse empowerment regarding reporting, given that it is already showing a slight increase. As a result of this project, the emergency department where the project took place will be incorporating 5 Actions into the continuing education for nurses on workplace violence.

Although nurses are not reporting workplace violence more frequently, the surveys indicated that they are asking for more information on how to protect themselves. In addition, the survey results demonstrated an increase in the nurses’ confidence related to de-escalating an aggressive patient. According to the most recent report (August 2019) from the public safety office at this hospital, only 1 case of patient violence has been reported from the emergency department since June 2019 when the second intervention was started. With so few nurses reporting, the data on the number of instances of violent behavior are incomplete. An ongoing analysis of the number of nurses reporting workplace violence as well as the number of violent encounters would be needed to determine if the assertive de-escalation training has been effective in reducing the number of violent encounters over time. In the meantime, the nurses have been encouraged to use the strategies they have been trained in to de-escalate patients in the emergency department assertively and to protect themselves.

Limitations

There were several limitations to this project. This was a convenience sample of emergency nurses at a single site in a single emergency department in Midwestern US. The potential sample size was 110 emergency nurses but despite multiple reminders, very few completed pairs of pre- and postsurveys were available for analysis. With such a small sample, it is difficult to evaluate if demographic characteristics may have confounded the results.

Furthermore, the sample size was not justified with a power analysis for the chosen statistics.

Another limitation is that the emergency nurses were asked to provide a self-report regarding their reporting of violent instances as well as a self-report regarding their confidence in de-escalating an aggressive patient and protecting themselves. The nurses may have responded to the survey on the basis of what they perceived was the appropriate response to the question being asked. However, this may not actually translate into their practice or behaviors. These limitations compromise the validity and generalizability of these results.

Implications for Emergency Nurses

The purpose of this practice improvement project was to increase the reporting of instances of workplace violence

by emergency nurses as well as to educate the nurses on de-escalation and self-protection techniques. The primary outcome of this project was the finding that although emergency nurses are still not reporting instances of workplace violence routinely, they do feel better prepared, after our brief educational intervention, to de-escalate a potentially violent patient and protect themselves. The key implications for emergency nursing practice from this project are that hospital administrators must take steps to protect emergency nurses and other health care workers from workplace violence using the strategies presented here as well as other appropriate measures.

The Emergency Nurses Association has published a position statement related to workplace violence, which states, "Emergency nurses have the right to education and training related to the recognition, management, and mitigation of all types of workplace violence."^{19(p. 355)} Educating emergency nurses on the importance of reporting workplace violence, and empowering them to report, is vital to changing the culture. Moreover, empowering nurses to de-escalate patients assertively, practice safe self-protection techniques, and be aware of the signs of impending aggression is vital. The findings of this study indicate that there is a need for further development and testing of interventions to increase the rates of reporting workplace violence. Furthermore, nurses may need reminders, support, and time to file such reports in a timely fashion. In addition, this study revealed that the emergency nurses surveyed felt that they lacked support and resources from their administrators to protect themselves from workplace violence. The 5 Actions training shows promise for this type of training in the future; however, further studies with larger samples of emergency nurses and ongoing tracking of workplace violence in these settings are required.

Conclusion

Workplace violence is highly prevalent, underreported, and may be normalized as part of the job in emergency nursing. If more emergency nurses reported altercations, it would allow a comprehensive analysis of these events that may suggest additional interventions to reduce the occurrence of workplace assaults, which could in turn create a safer work environment and improved job satisfaction for emergency nurses. This is a multifaceted problem, and we, as a health care community, need to do more to ensure the safety of health care workers.

Author Disclosures

Conflict of interest: none to report.

Supplementary Table 1 Phase I: Pre-/Postsurvey

The purpose of these surveys is to determine how many violent altercations are happening between nurses and patients; how many are being reported; if they are not reported then why not; to educate nurses on the ramifications of not reporting; to empower nurses to speak up and report any and all violent altercations.

Please be assured that all answers will be confidential with the surveys linked via your mother's birthdate.

Participation in this project is 100% voluntary and if you are uncomfortable with answering a specific question you may skip it, choose the option, "I prefer not to answer," or "Not applicable." Only the study team will have access to the data and only the aggregate results will be released to the administration.

1. Please list your Mother's birth month and day 00/00.

2. What is your gender?

3. a.Female

4. b.Male

5. c.Prefer not to answer

3.

What age group are you in?

- a.20-30
- b.31-40
- c.41-50
- d.51-65
- e.66 or over
- f.Prefer not to answer

4.

What is your ethnicity?

- a.Hispanic or Latino
- b.Black or African American
- c.White or Caucasian
- d.American Indian or Alaska Native
- e.Prefer not to answer

5.

How many years have you been an RN?

- a.1-5
- b.6-10
- c.11-15
- d.16 or more
- e.Prefer not to answer

6.

Have you ever been assaulted in any way at work by a patient or visitor?

- a.Yes
- b.No
- c.Prefer not to answer

7.

If you answered yes to #6, how many times have you been assaulted in the past month?

- a.1-3

- b.4-6
- c.7-10
- d.Prefer not to answer
- e.Not applicable

8.

When thinking about the assault/assaults were they verbal or physical?

- a.Verbal
- b.Physical
- c.Both
- d.Prefer not to answer
- e.Not applicable

9.

If physical what was it? Choose all that apply:

- _ Hitting
- _ Kicking
- _ Spitting
- _ Choking
- _ Other
- _ Prefer not to answer
- _ Not applicable

10.

Did you report it?

- a.Yes
- b.No
- c.Prefer not to answer
- d.Not applicable

11.

Do you report every time?

- a.Yes

- b.No
- c.Prefer not to answer
- d.Not applicable

12.

If you did report it were you satisfied with the result?

- a.Yes
- b.No
- c.Prefer not to answer
- d.Not applicable

13.

If you didn't report it why not? Choose all that apply.

- _ Lack of support
- _ Scared
- _ Will not change the outcome
- _ Part of the job
- _ Do not know how to find the reporting tool
- _ Do not have time
- _ Prefer not to answer
- _ Not applicable

14.

What area of the emergency department were you working in when you were assaulted?

- a.Triage
- b.Trauma
- c.Other
- d.Prefer not to answer
- e.Not applicable

15.

Do you perceive violent altercations (verbal or physical) as a "part of your job"?

- a.Yes

- b.No
- c.Prefer not to answer

16.

Do you understand the mental and physical ramifications of not reporting violence?

- a.Yes
- b.No
- c.Prefer not to answer

17.

On the following scale (1-10) how confident are you that you will report all violent altercations from now on? (Sliding Scale)

Not Confident Medium Confident Very Confident

1 2 3 4 5 6 7 8 9 10

Supplementary Table 2 Phase II: Pre-/Postsurveys

The purpose of these surveys is to determine how prepared nurses feel to de-escalate and/or self-protect with aggressive patients.

These surveys are completely anonymous. Please be assured that all answers will be confidential with the surveys linked via your mother’s birthdate. Participation in this project is 100% voluntary and if you are uncomfortable with answering a specific question you may skip it, choose the option, “Prefer not to answer,” “NA,” or quit entirely without penalty. The survey should take approximately 3-4 minutes to complete. Only the student researcher will have access to the data and only the aggregate results will be released to the administration. Your participation, or lack of participation, will have no effect on your job placement and/or evaluations. Your completion of this survey indicates your willingness to participate in this study.

1. Please list your mother’s birth month and year 00/00 (to link your pre/post-survey): ___/___

2. What is your gender?

- 3. a.Female
- 4. b.Male
- 5. c.Prefer not to answer

3.

How many years have you been an RN?

- a.1-5
- b.6-10
- c.11-15
- d.16 or more

- e.Prefer not to answer

4.

Have you ever been assaulted in any way at work by a patient or visitor?

- a.Yes
- b.No
- c.Prefer not to answer
- d.Not applicable

5.

If you answered yes to #4, how many times have you been assaulted in the past month?

- a.1-5
- b.6-10
- c.More than 10
- d.Prefer not to answer
- e.Not applicable

6.

Did you report it?

- a.Yes
- b.No
- c.Prefer not to answer
- d.Not applicable

7.

On the following scale how confident are you that you can protect yourself from an aggressive patient?

- a.Not confident
- b.Somewhat confident
- c.Medium confidence
- d.High confidence
- e.Highest confidence
- f.Prefer not to answer
- g.Not applicable

8.

On the following scale how helpful do you think learning self-protection techniques would be for your work life?

- a. Not helpful
- b. Somewhat helpful
- c. Medium helpfulness
- d. Very helpful
- e. Highest helpfulness
- f. Prefer not to answer
- g. Not applicable

9.

Have you received training at work on how to de-escalate patients?

- a. Yes
- b. No
- c. Prefer not to answer
- d. Not applicable

10.

On the following scale how confident are you that you can de-escalate an aggressive patient?

- a. Not confident
- b. Somewhat confident
- c. Medium confidence
- d. High confidence
- e. Highest confidence
- f. Prefer not to answer
- g. Not applicable

Supplementary Data

To access the supplementary material accompanying this article, visit the online version of the *Journal of Emergency Nursing* at www.jenonline.org.

DETAILS

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Collaborative Rescue from Double Trouble: Case Review: JEN

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ABSTRACT (ENGLISH)

A 76-year-old woman was discovered down in the bathtub of her home, aphasic with right-sided paralysis by her husband, who called 911. She had no previous significant medical history, but her husband reported complaints of right arm and chest pain from the patient in the previous 2 days. Although transporting prehospital emergency medical service (EMS) providers did not perform a 12-lead electrocardiogram (ECG), they did place the patient on monitoring equipment for lead II heart rate, pulse oximetry, and noninvasive blood pressure measurements. Her initial vital signs included a blood pressure of 180/110 and sinus tachycardia with a rate of 120 beats per minute. She was afebrile. EMS providers performed a stroke scale and suspected that the patient was experiencing a large-vessel occlusion (LVO) cerebrovascular accident (CVA). She was transported emergently to a comprehensive stroke center. This comprehensive stroke center is a 630-licensed-bed facility with associated accredited chest pain center and primary percutaneous coronary intervention (PCI) capabilities.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on concomitant large-vessel occlusion and S-T segment elevation myocardial infarction indicates no reported cases of successful revascularization by rapid mechanical thrombectomy of cerebral and myocardial arteries.
- This article contributes a review of a collaborative effort that resulted in a favorable patient outcome.
- Key implications for nursing practice found in this article are that bedside nurses may be the primary sentinel of critical events, and education of health care providers facilitated by emergency nurses contributes to successful outcomes.

Case Report

A 76-year-old woman was discovered down in the bathtub of her home, aphasic with right-sided paralysis by her husband, who called 911. She had no previous significant medical history, but her husband reported complaints of right arm and chest pain from the patient in the previous 2 days. Although transporting prehospital emergency medical service (EMS) providers did not perform a 12-lead electrocardiogram (ECG), they did place the patient on monitoring equipment for lead II heart rate, pulse oximetry, and noninvasive blood pressure measurements. Her initial vital signs included a blood pressure of 180/110 and sinus tachycardia with a rate of 120 beats per minute. She was afebrile. EMS providers performed a stroke scale and suspected that the patient was experiencing a large-vessel occlusion (LVO) cerebrovascular accident (CVA). She was transported emergently to a comprehensive stroke center. This comprehensive stroke center is a 630-licensed-bed facility with associated accredited chest pain center and primary percutaneous coronary intervention (PCI) capabilities.

On arrival at the emergency department, the patient had a National Institute of Health Stroke Scale score of 15. The patient presented with right-sided weakness; was unable to speak, answer questions, or follow commands; and displayed minor facial paralysis. The primary assigned emergency nurse placed the patient on a portable cardiac monitor on arrival in the emergency department for direct transport to the computed tomography (CT) scanner after receiving notice of a stroke alert from EMS. This nurse then noticed a rhythm abnormality during the move to radiology, retrieved an ECG machine, and completed a 12-lead ECG that showed an acute anterolateral S-T segment elevation myocardial infarction (STEMI) (Figure 1). In addition, a point-of-care troponin assay was performed by the nurse to reveal further evidence of myocardial damage (troponin level 5.9 ng/mL). These actions were critical in discovering the STEMI during the confirmation of stroke as the primary complaint.

The CT angiogram revealed a left-sided anterior cerebral artery (ACA) occlusion, and the neurologic interventionalist was notified. When it was suspected that the patient was indeed experiencing a myocardial infarction in addition to the stroke, the primary emergency nurse notified additional providers. The ED physician, neurologic intensivist, neurologic interventionalist, and cardiac interventionalist convened at the patient's side to discuss the plan of care. Their swift confirmation of the patient's conditions led them to the decision of restoring cerebral flow first. The patient was taken urgently to the neurologic vascular institute, where mechanical thrombectomy of the left ACA was performed and a right ACA intracranial stent was placed (Figure 2). After the restoration of circulation to the anterior cerebral arteries, the patient was moved to the coronary catheterization laboratory, where PCI revealed a 100% occlusion of the left anterior descending coronary artery. The left anterior descending artery was opened via PCI and 2 stents were placed, which reestablished blood flow to the myocardium (Figure 3).

Pathophysiology of LVO with STEMI

LVO strokes most often present with aphasia and hemiplegia. Patients with STEMI may present with chest pain, shortness of breath, or a myriad of other signs and symptoms. Theories regarding the origins of these dual cardiocerebral emergencies may include occurrence of hypertensive crises precipitating embolic showers,¹ catecholamine release from the primary medical event (whether stroke or myocardial infarction), or predisposition to embolic events because of their medical history and comorbidities such as hypertension, atrial fibrillation, hypercoagulable states, subtherapeutic anticoagulation regimens, diabetes, and presence of a patent foramen ovale.²

Treatment

Because "time is brain" and "time is heart," patients who have had stroke or STEMI should be seen at an appropriate facility. Patients with the presentation of LVO stroke may be candidates for thrombolytic therapy³ and/or mechanical

thrombectomy.¹ If arriving from the prehospital environment, they should be rapidly transported to a comprehensive stroke center capable of neurologic vascular intervention. These patients must immediately undergo CT angiogram and CT perfusion testing. A 12-lead ECG should be performed on all patients suspected of having a CVA. Acute STEMI patients should be treated at a facility capable of PCI. If recanalization of vessels can be promptly achieved, patients may demonstrate a better long-term quality of life.¹ A literature review did not reveal any cases of concomitant LVO stroke and STEMI that have been successfully treated in this manner.³ There are reported cases of aortic dissection with associated stroke,⁴ and 1 case of a reported concomitant stroke and pulmonary and myocardial infarction from thrombus.² Historically, the outcome of such patients with simultaneously occurring occlusive events has been poor.^{2,5} This trend spotlights the need for swift, thorough ongoing assessment by emergency nurses of patients with CVA or STEMI with rapid notification of providers to enter into the collaboration needed for successful intervention (Table 1). There exist far more devices and therapies to assist failing cardiac function than those that exist for neurological deficit correction, thus emphasizing that reperfusion of the brain should take precedence over reperfusion of the heart when simultaneous occlusive conditions occur.

Implications for Emergency Nursing

Concomitant LVO and STEMI are uncommon occurrences.^{5,6} Patients with any type of neurologic deficits should be assessed for cardiac complications. Emergency nurses should obtain a 12-lead ECG on patients suspected of having a stroke and evaluate the need for rapid laboratory blood tests such as cardiac enzyme levels. Outreach education to EMS community providers servicing stroke centers can prove valuable in achieving beneficial outcomes by teaching recognition and destination triage of LVO strokes. In addition, in-hospital provider education of primary bedside nurses in recognizing STEMI also contributes to improved patient results.⁷

This hospital employs an EMS coordinator nurse who works closely with EMS providers routinely in field education. Both the neurologic and cardiac intervention specialty physicians who cared for this patient have been an active part of emergency nurse-facilitated direct education of EMS field providers in addition to face-to-face formal teaching of emergency nursing staff. It was this education that led EMS providers to recognize the LVO stroke and the appropriate transport and the suspicion for and discovery of associated STEMI by the primary emergency nurse. This collaboration meshed to produce an excellent outcome during a rare patient presentation.

Case Conclusion

The patient was admitted to the cardiac care unit, where a transthoracic echocardiogram was normal, though the patient experienced periprocedural atrial fibrillation. She was ultimately discharged on day 4 with no residual deficits and a National Institute of Health Stroke Scale of 0. On release, the patient was placed on direct oral anticoagulant and aspirin therapy. It is thought that the origin of this patient’s event was cardioembolic. An implantable cardiac loop recorder was inserted into the patient, and paroxysmal atrial fibrillation persisted for several weeks after the event. A few months later, she received a left atrial appendage closure device at the same facility.

Author Disclosure

Conflicts of interest: none to report.

Patient found:	07:15
EMS notified:	07:55

First medical contact:	08:14
ED arrival:	08:52
Vascular institute arrival:	09:30
Groin puncture:	09:44
TICI 3 reperfusion:	10:15
Cardiac cath lab arrival:	10:37
TIMI 2 reperfusion:	10:59

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Diagnostic Sensitivity of the Dynamic Appraisal of Situational Aggression to Predict Violence and Aggression by Behavioral Health Patients in the Emergency Department: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

Introduction

The Dynamic Appraisal of Situational Aggression (DASA) is an assessment tool that has been validated to predict violent or aggressive behavior in psychiatric inpatient settings. Its validity has not been established for use in the emergency department.

Methods

The DASA was implemented within the electronic health record of an academic medical center with inpatient psychiatric services. A retrospective analysis was conducted using Spearman rank-correlation coefficients to compare a final risk score with the subsequent occurrence of violence or aggression, defined as the use of hard leather physical restraints or the administration of intramuscular sedative medication. A receiver operating characteristic curve was used to summarize the predictive accuracy of the tool to assess aggression in behavioral

health patients in the emergency department.

Results

A total of 3,433 scores were analyzed, representing 1,548 patients. The DASA had predictive validity with increasing scores comparing all tested cutoff scores against incidence of violence and aggression. The area under the curve comparing scores of 0 versus more than 0 was 0.79. The median time to subsequent aggression was 110 minutes.

Discussion

The DASA has predictive validity for use in evaluating behavioral health patients in the ED setting in an urban academic medical center. The tool is capable of predicting violence or aggression within a time frame conducive to the implementation of noninvasive measures. The DASA should be tested in other ED settings to further establish its predictive validity.

FULL TEXT

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Document 11 of 21

Violence Against Nurses in the Triage Area: A Mixed-Methods Study: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

Introduction

Workplace violence is a serious occupational problem among nurses in emergency departments. The aim of this study was to better understand workplace violence experienced by triage nurses.

Methods

A mixed-methods study was carried out with 27 Italian nurses involved in the triage area of an emergency department. Quantitative data were collected using the Violent Incident Form and qualitative data were obtained from 3 focus groups.

Results

Ninety-six percent of triage nurses had suffered an episode of violence during the previous year. Participants reported that perpetrators of violence were primarily patients' relatives or friends (62%), usually male and in a lucid state of consciousness. The aggressor was a male patient in 31% of violent episodes. Male nurses reported only verbal abuse, unlike female nurses who suffered both physical and verbal episodes. Females received assistance from other staff during the aggression event more frequently than males, and females more frequently suffered from physical injury. Only physical and verbal aggressions were associated with physical injury. Four main themes emerged from the focus groups.

Discussion

Nurses reported that high exposure to workplace violence in triaging had significant consequences on their psychological well-being and on their behavior at work and at home. Violence, perceived as a personal and/or professional injury owing to insufficient organizational support, led professionals to experience feelings of resignation and to believe that abuse was an inevitable part of the job. Nevertheless, in our study, the precipitating factors were investigated, suggesting several possible solutions to limit this phenomenon.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on workplace violence against nurses indicates that violence in the emergency department is a common worldwide phenomenon.
- The main finding of this study indicates that workplace violence has significant consequences for nurses' psychological well-being and their behavior at work and at home.
- Key implications for preventing workplace violence in emergency nursing practice, in accordance with this research, include communication skills training, educational campaigns, organizational changes, security measures, and more recognition of the nurse as a professional.

Introduction

Workplace violence (WPV) against health care workers, especially nurses who have the highest exposure to any form of WPV,¹ is considered a serious occupational concern worldwide. The real incidence of WPV in health care settings is difficult to estimate owing to significant underreporting of violent incidents, especially when no physical injury has occurred.² WPV is a serious risk for the safety and well-being of both patients and health professionals.^{3,4} Although, in 2007, the Italian Ministry of Health issued a recommendation to prevent violence against health workers, most studies conducted in the Italian health care context confirm that today WPV represents a significant and frequent phenomenon.^{5,6} Especially in the emergency department, where aggression rates are relatively high,^{7,8} the triage area has been identified as a setting where this risk is higher than in any other health department.⁹ Many risk factors for violence are reported in the emergency department: inadequate staffing, lack of privacy, crowding, lack of skills for managing violence, inadequate communication, and availability of unsecured equipment that can potentially be used as a weapon.⁹⁻¹¹

Violence on health workers causes not only physical injury but also psychological disorders.^{3,11} WPV has effects on lifestyle, such as increased consumption of tobacco and food, sleep disorders, worsening of social relationships, and risk of being isolated.^{11,12} Exposure to WPV could lead to depression, stress-related disorders, and post-traumatic stress disorder. Moreover, it is significantly associated with a high incidence of burnout, job dissatisfaction, reduced patient safety, and increased health treatment adverse events.^{3,11,12} Recent studies have highlighted that 92.7% of nurses working in the emergency department who had suffered from WPV reported their intention to be transferred to another department.^{12,13}

Though there are many quantitative reviews and a qualitative meta-synthesis on violence perpetrated against emergency nurses, none of them is fully focused on the triage area. These studies, however, do not identify the critical organizational and environmental issues of this setting, characterized by nurses' front-office activities and waiting times for patients and their relatives. Furthermore, very little research focuses exclusively on triage nurses,^{14, 15} although clinical experience and observational studies suggest that triaging is the nursing activity with the highest risk,¹⁶ during which nurses are 3 times more likely to experience an episode of patient-related violence.⁹ According to Ramacciati et al,¹⁵ triage nurses reported feelings of vulnerability, loneliness, and lack of support for their work in the emergency department. The Italian Ministry of Health set up an observatory for violence against health workers (2018), which indicates the need to analyze specific risk factors in those health services and departments where episodes of aggression are most likely to occur, for implementing effective measures for WPV prevention.¹⁷ Therefore, the examination and exploration of first-hand experiences of triage nurses with WPV could point out

differences compared with nurses working in other health departments in order to suggest specific solutions for this complex phenomenon. The large number of nurses who are victims of violence and the potential negative consequences on the quality of care and staff well-being justify the need for further investigation of this phenomenon with a focus on the triage area. In this regard, a study with a mixed approach, which combines the methodology of quantitative and qualitative research, allowed us to gain a comprehensive and deeper understanding of WPV suffered by triage nurses in the emergency department.

The aims of this study were to (1) investigate the most significant episode of physical and/or verbal violence suffered by nurses working in a triage area in the previous year and to analyze the association between violent episodes and the selected variables and (2) explore nurses' feelings concerning the episodes of WPV experienced and collect their expectations about resolutions with their suggestions on how to prevent and manage episodes of violence.

Methods Design

This study presents a parallel convergent mixed-methods design (cross-sectional quantitative method and a phenomenological qualitative approach).

Setting and Participants

The study was implemented in the emergency department of a hospital in northern Italy. Data were collected between August 29, 2019, and October 16, 2019. All nurses involved in triage activities (n = 27) were considered eligible and therefore invited to participate in this study.

Data Collection Quantitative Data

To detect the worst episode of physical and/or verbal WPV suffered by triage nurses during the previous 12 months, we administered the Violent Incident Form (VIF) by Arnetz.¹⁸ The VIF is a questionnaire that consists of 18 items, with binary (yes or no) or multiple-choice responses that investigate violence in health care environments, and has been shown to have satisfactory content validity and reliability. It was developed after an extensive survey of the literature and research concerning risk factors of violence and tested at an emergency department in Stockholm, Sweden. Then, VIF was re-administered to the same first sample to test the ability of victims to recollect the details of a violent event that had occurred several months earlier and to examine its test-retest reliability.¹⁸ It is a 1-page checklist that summarizes the key aspects of a violent incident (type of assault, shift, place, activity that preceded the incident, the actions taken by victim, and consequences) and the characteristics of the aggressor (sex, age, and state of health) and workers assaulted. The VIF was designed to report all kinds of violent events, including those in which little or no physical injury is suffered by the victim.¹⁹ The Italian version of the VIF demonstrated a reliability coefficient of 0.91, measured using a split-half method through test-retest at a distance of 1 month and corrected with the Spearman-Brown formula.²⁰ This questionnaire has previously been used in other Italian studies to investigate the prevalence and characteristics of WPV in emergency departments.^{4,6,21} In our study, the VIF was completed independently by each nurse, and within 15 days of delivery it was placed in a special sealed container.

Qualitative Data

Only the nurses who had declared on the VIF that they had suffered at least 1 episode of violence in the previous year were invited to participate in the focus groups. Focus groups included 5 to 10 participants each and were conducted by a nurse researcher with experience in running focus groups and an assistant. All participants met the moderator and the assistant before the start of the focus group session to establish an initial relationship. The moderator facilitated the discussion without influencing the participants, and the assistant prepared the setting and took notes during the focus group on the characteristics of the statements (ie, salient themes, particular linguistic expressions, group dynamics, etc). The focus groups were held at the times and places preferred by the participants and lasted between 60 and 120 minutes. Verbatim transcripts were recorded and typed into Microsoft Excel. Each

focus group started with a video about violence against health professionals titled “Respect those who help you.” The video was produced by the Italian National Federation of Nursing Regulatory Board to raise public awareness of the problem of violence toward health workers and had been released for a social campaign 6 months earlier. Participants had already seen the video, which was used to help them focus their attention on this topic. After the video, 5 focus group questions were asked: “What did you experience during an episode of violence? What do you think the triggers of the phenomenon are? After an episode of physical and/or verbal violence, what were the sensations of your experience in the short and long term? Did the episodes that you experienced change your way of living and working? What are your expectations about solving the problem and/or are there any suggestions you would recommend to effectively manage these events?”

Ethical Considerations

The present study was approved by the local ethics committee of Area Vasta Emilia Nord (protocol 412-2019 of July 2, 2019) and was conducted following the principles of the World Medical Association Declaration of Helsinki (1964). Each participant received both oral and written information about the study and authorship of the research topic, and subsequently signed consent was obtained. There was no interdependence between researchers and participants. Participation in the study had no impact on the nurses' work situations nor did it involve any benefit or incentive. There was no form of coercion or undue influence on participation. The participants were assured about the confidentiality of the data, and it was clearly stated that they could withdraw from the study at any time. Nurses' data were de-identified following transcription and the nurses were encouraged to maintain confidentiality of the focus group discussions.

Data Analysis

Descriptive statistics were used to describe the characteristics of the participants and the violent incidents. In bivariate analysis, Fisher's exact tests were used to assess the associations between violent incidents and aggressor characteristics for both physical and verbal violence and the sex of the nurse. *P*

The study was based on a phenomenological approach, a very suitable method for investigating subjective phenomena and daily life experiences, in the belief that the fundamental and critical truths about reality are rooted in people's life experiences. After the first focus group, we conducted a qualitative analysis using the method described by Creswel and Poth.²² In the first stage, the researchers read the transcribed data several times, focusing on selected significant statements. Afterward, the researchers grouped similar expressions and extracted the main themes with similar content in the significant statements, which in turn were grouped and categorized into themes with high abstraction. Focus groups were conducted until theoretical saturation was achieved and no new themes appeared. The 7-phase Colaizzi method was chosen among the various qualitative analysis methods because this method is the only one that requires participants to validate findings to ensure their accuracy and credibility. The analysis of the qualitative data was performed by 2 researchers and subsequently confirmed by a third researcher. Finally, we referred the findings to the participants to validate them. For rigor, the guidelines suggested by Denzin and Lincoln²³ were applied to ensure credibility, transferability, reliability, and confirmability. This study adhered to the Consolidated Criteria for Reporting Qualitative Research guidelines.²⁴

Results Quantitative Analysis Response Rate and Participants' Characteristics

All the nurses involved in triage activities ($n = 27$, 15 men and 12 women) agreed to participate in this study, and after providing informed consent, completed the questionnaire (100% response rate). The sample had an average age of 39.9 years ($SD = 7$) similarly distributed across the 2 sexes (men 39.3 years, range 31-55; women 40.7 years, range 29-56). The average seniority of nurses was 13 years ($SD = 8.7$) for both men and women.

WPV Prevalence and Characteristics

A total of 26 participants (96.3%) stated that they had suffered from WPV during the previous 12 months. Of these, 24 assaulted nurses (92.3%) reported having experienced verbal abuse, whereas the others (n = 2; 7.7%) reported simultaneous physical and verbal aggression (^{Table 1}). Male nurses reported only verbal incidents (n = 14; 100%), unlike female nurses who suffered physical and verbal episodes simultaneously (n = 2; 16.7%). Violent incidents mainly occurred during the night shift (n = 14; 53.8%) and in the afternoon (n = 8; 30.8%). A total of 16 aggressors (61.5%) were relatives or friends of patients, of whom 14 (87.5%) presented a lucid and conscious state, and 2 (12.5%) were under the influence of alcohol or narcotics. The assaulting relatives and friends were primarily men (n = 14; 87.5%), with an average age of 52 years (SD = 4). Only 30.8% (n = 8) of the violent episodes were committed by a patient, always men, with an average age of 47 years (SD = 17), who, in 2 cases (25%), had psychiatric disorders. The remaining 2 violent incidents (7.7%) were perpetrated together by patients and their companions. Thus, 69.2% (n = 18) of the attacks against nurses were perpetrated by a visitor alone or a visitor together with the patient.

Aggression most frequently occurred in the area surrounding the triage area (n = 10; 38.5%), at the triage reception (n = 9; 34.6%), and in the triage admission (n = 4; 15.4%). Three violent episodes occurred in the waiting room (11.5%). The activities that preceded the assault were patient assessment (n = 9; 34.6%), physical care activities (n = 8; 30.8%), conversation (n = 5; 19.2%), and demands made by patients and their companions (n = 4; 15.4%). The violent incidents most frequently occurred at the front office (n = 8; 30.8%), during admission (n = 7; 26.9%), or during the wait (n = 7; 26.9%). Eighteen nurses (69.2%), before the assault occurred, did not perceive something was going to happen. Eleven respondents (42.3%) were working alone when the incident occurred. Both of the nurses who were assaulted both physically and verbally at the same time (n = 2; 7.7%) were working alone when the incidents occurred and were helped by other staff members who came to support them (^{Table 2}). Female nurses were helped by other staff during the violent events more frequently than their male colleagues were (Fisher's exact test = 7.58; *P* = 0.03) as shown in ^{Table 1}. Nurses who were assaulted both physically and verbally (n = 2; 7.7%), more frequently suffered from physical injury and fear than nurses who were only verbally abused (Fisher's exact test = 14.01; *P* ^{Table 1}).

The psychological consequences reported by the respondents who were verbally assaulted were the following: anger (n = 6; 25%), irritation (n = 4; 16.7%), sense of helplessness (n = 1; 4.2%), and disappointment (n = 1; 4.2%). None of the nurses declared a feeling of guilt following a violent event, whether it was physical or verbal (^{Table 2}). A difference, although not statistically significant was observed in the reporting method used by nurses: participants did not complete a formal report for 70.8% (n = 17) of the verbal abuses and for 50% (n = 1) of physical and verbal aggressions; following verbal abuse, the most common form used by the victims was the incident reporting form (n = 6; 25%) (^{Table 2}). Only female victims completed a work injury report (n = 1) and a police report (n = 1), as shown in

^{Table 1}

Qualitative Analysis

Qualitative analysis yielded 4 main themes: precipitating factors of WPV at triage, violence is an intrinsic part of triaging, personal and professional consequences of WPV, and solutions for preventing and managing WPV. Data saturation was observed when the participants' answers repeated and did not add anything new to the study phenomenon after 3 focus groups involving a total of 16 triage nurses.

Precipitation Factors of WPV at Triage

The triage nurses identified specific reasons that they believed favored or induced violent behavior. Most of the participants reported that violence perpetrated by patients and relatives was often owing to self-perpetuating problems related to triage activity: patients' and visitors' expectations about solving their health problem that they

deemed urgent, improper use of the emergency department, crowding, and long waiting times: *They arrive with a precise request and if their expectations are ignored, their reaction is often violent (participant [P] 4); Everyone wants immediate answers [...] we are expected to respond to this kind of request (P10); Patients would like to be examined immediately, so also having to wait for hours, I think, triggers a mechanism of anger (P12); It is an important factor: the improper use of ED. Almost every time [...] aggressive people shouldn't be there (P17); [...] an access code of minor priority means more aggressiveness [...]. (P14)*

Some nurses identified the reason for the onset of violence in the patient's illness: *"The opening of the psychiatric ward has certainly increased the number of episodes, because we, at triage, are exposed to the arrival of these patients, [...] without any type of filter." (P24)*

Furthermore, participants underlined how the emotional state of the patients and visitors, such as fear, insecurity, and uncertainty of their condition, aggravated by the nurses' poor communication skills and improper care, can trigger aggressive reactions. Triage nurses recognized that their way of communicating could influence the outbreak of violence: *Essentially it is people's insecurity, fear. Obviously also the fact of not feeling supported by us (P6); It's a communication problem, isn't it? I do not blame only the patient who comes here full of expectations, but we must also be able to communicate well with them. [...] if you do triage work and do not look at the person in the eyes, that person feels he or she is not being taken into full consideration and does not feel taken care of. (P16)*

Violence Is an Intrinsic Part of Triage

Most participants expressed a feeling of resignation and helplessness when they suffered an episode of violence, and in their responses, nurses often tended to consider violence as an intrinsic part of their triage activity. The recurrence of violent events for a long time and the perception of a lack of effective preventive measures led nurses to consider this as an inevitable phenomenon: *[...] we are so resigned to this thing because it has not been changed for a long time [...] now, and we know that we are at the mercy of these people who attack us on various fronts. [...] before I used to work in another department, where surely aggressions were not so frequent as in the triage area [...] (P6); We have to learn that violence is part of work [...] (P4); The sense of powerlessness at times, of not being understood and of being unable to do anything [...]. (P10)*

The difficulty in predicting assaults and the consequent inability to prevent violent incidents make nurses feel vulnerable and at the mercy of events: *[...] that fact of never being able to foresee people's reactions so well, must be taken into account a little (P4); It gave me the immediate feeling of unexpected anger, I didn't expect it [...]. (P12)*

Many participants experienced the feeling that they worked alone in a dangerous context; they perceived themselves as being alone in the front line facing all the requests, left without adequate protection and unsupported by management. The sense of loneliness and abandonment derived from the perception of insufficient protection starting from colleagues and other professionals who worked in the emergency department but in different locations: *[...] we are poorly protected (P17); [...] in the short term, we immediately feel disappointed [...] alone, because in any case we have no one who protects us in the event we have to give response [...] you passively absorb what happens [...] you suffer humiliation [...] you give up [...]. I have never seen a doctor [physician] leave the ward and take part in triaging. (P14)*

Finally, triage nurses believed that the nursing profession was more exposed to violence due to the poor social recognition of the nurse's role and the negative influence of the media: *"[...] people attack you because they are 'only ' talking to a nurse [...] most of the time aggression occurs against nurses and nursing assistants. Doctors ' [Physicians]' are attacked very rarely." (P4)*

Personal and Professional Consequences of WPV

All the nurses described episodes of violence as something that shook them profoundly and emotionally: “

Afterwards a sense of frustration also takes over you because of the fact that an unknown person who does not know me can afford to insult me in a public place, where everyone else listens to the bad words he says to me.”
(P13)

Most participants experienced psychological pain that could last for years, with difficulty in forgetting the abuse they suffered and a tendency to brood with lingering anger:*[...] for sure you take it home, in the sense that when something like this [WPV] happens to you, even if you don't want to think about it at home, you always think about what happened. It leaves a bitter taste in your mouth and you are there brooding (P13); [...] my anger remains for years [...]. (P6)*

Experiencing violence had significant professional consequences, with an impact on motivation, affecting the ability or willingness of triage staff to do their job:*[...] therefore resignation grows in the face of these episodes [...] at the beginning you are strongly motivated, but gradually, as the years go, it is like a drop that erodes slowly, slowly my job motivation [...] (P18); If it happens to you at the beginning of your workshift, your day is ruined and you struggle. [...] over time, frankly, I can't forget violence. (P8)*

Nurses felt injustice was done not only to them but also to their profession and colleagues because of WPV:*[...] it is surely the lack of respect towards the person and above all towards the professional (P21); These are things that do not go away and I find hard to cancel, in the sense that for me there is no tolerance for violence and therefore they are things that make me think and brood. I brought home the burden of violence suffered by a colleague, in the sense that even if I did not experience it personally, I was equally upset. (P20)*

Nurses reported that WPV could change their approach toward the patient and also activities and relationships outside their workplace:*My empathy has been reduced by violence, I have feelings of indifference towards others as I did not initially; [...] over the years I realize that my triaging ability has changed a little bit, because obviously I have adopted defensive methods, I am already biased against others (P6); The most dramatic thing is that over time you change your approach towards others, that means a change in your behavior when you are away from work: I realized that my attitude towards people had changed (P8); [...] trivially, I avoid going to a market or a concert, I no longer stand crowded places. (P11)*

Despite everything, despite the violence suffered, 2 participants declared their commitment to maintain good professional standards:*We must always try to maintain a good standard in our job (P21); [...] no work changes, absolutely not. You do your job, try to do it better. (P14)*

Solutions for Preventing and Managing WPV

Respondents presented several ideas that could help reduce violent incidents. For example, 1 nurse suggested that educational campaigns could be useful: *“There are lots of information campaigns about not drinking alcohol during pregnancy, about the risks of smoking, not wearing seat belts in the car, but I have never seen a training campaign on how to make the best use of the ED.” (P20)*

Several nurses suggested organizational solutions and measures to better understand and meet the needs of patients and family members. Triage nurses highlighted the need to implement diagnostic-therapeutic pathways for some types of disorders and the provision of nursing care at the family and community level:*Providing better and more outpatient health care services; special care paths could be implemented (P18); An important project that includes the presence of nurses in the waiting room. This could be a future project to prevent aggressive episodes, that is, with a nurse who interacts with the public and constantly informs them. (P2)*

Participants suggested specific training courses on preventing and managing violence:*We have taken many courses on how to save the patient, on how to treat the patient during an emergency, but there is no course that teaches us how to communicate with people, to use the right words under certain circumstances, in situations of aggression, ill*

feelings of patients and their relatives, even threatening gestures. [...] I think we need to take more courses, communication courses on how to approach the patient and their relatives. (P13)

A few nurses suggested raising security measures, such as a nearby police station: “[...] the police station is just in front of it [emergency department].” (P17)

Finally, 1 participant highlighted the need to strengthen the role and image of nursing: “I hope our professional image and health care role can be enhanced a little more in the future.” (P8)

Discussion

The purpose of this study was to explore the first-hand experience of nurses to gain a deeper understanding of WPV in the triage area using a mixed-method approach. Our study adds uniquely to the literature by focusing specifically on triage emergency nurses in the Italian setting, providing evidence on today's general underestimation of the frequency and impact of WPV on health workers who moreover often feel left alone at the forefront. All eligible nurses participated in this study, showing great interest in this topic, which represents an engaging and frequent workplace issue. It is noteworthy that such a high response rate (100%), which is unusual, was obtained without any form of coercion and without benefits for participating in the research. We found a very high prevalence of WPV (96%) among nurses working in the triage area, especially considering that the instrument we administered (VIF) investigated only the most significant episode of physical and/or verbal violence suffered by nurses during the previous year. Therefore, nurses may have been exposed to a greater occurrence of minor violent episodes in nursing practice. Previous Italian studies that used the VIF revealed that an emergency department was one of the settings with the greatest risk of violence toward health care workers.^{4,6,21} In particular, 1 study highlighted that the waiting room and triage in the emergency department were the areas with the highest risk of WPV.⁴ Our results were consistent with those of an Australian study focused on this topic.⁹ Survey respondents stated that verbal abuse was the most frequent (92%) form of violence in triaging, in agreement with a recent systematic review and meta-analysis.⁸

Nurses reported that the perpetrators of WPV were primarily patients' relatives or friends, usually men and in a lucid state of consciousness. In 31% of the violent episodes, the aggressor was a male patient and, moreover, in 25% of these cases, was affected by a psychiatric disorder. Regarding aggressors, the literature reports conflicting data on the frequency of violence perpetrated by patients or their relatives.^{7,8,12,25} We observed the highest frequency of violent episodes during night shifts, followed by afternoon shifts, in line with most studies.^{3,8} Data suggested that attacks against nurses occurred during all types of nursing activities and in all triage rooms, and quite frequently when a professional was working alone. The sample reported how infrequently they perceived, before an attack, that something was going to happen. As Wolf et al²⁶ suggested, limited recognition by nurses of violence cues indicating a high-risk person or situation, associated with a culture of violence acceptance, can constitute barriers to prevention and reduction of this phenomenon.

In the present study, we observed that the violent incidents involving male nurses were all verbal attacks, unlike the WPV incidents involving female nurses who suffered from physical and verbal violence simultaneously. As expected, only physical violence resulted in physical injury. Fear was the emotion most frequently reported following an episode of physical violence, whereas anger and irritation were reported following verbal abuse. We found that most of the violent episodes were not reported by respondents: 70.8% after a verbal abuse and 50% after physical and verbal violence. Our emergency nurses presented underreported data similar to an intervention study,²⁷ and as several authors have suggested, nurses should be encouraged to complete incident reports to ensure data informing response systems are accurate.²

In the 3 focus groups, 16 nurses reported their feelings concerning any episode of WPV they had suffered during

their triage activity. According to our focus-group participants, the most aggressive people were those (patients and their relatives) who inappropriately accessed the emergency department for nonurgent health problems and expected to have a quick solution to their problems, unintentionally crowding the triage service and causing longer waiting times. Participants were of the opinion that the disappointment of patients and their family members regarding their expectations, sometimes unrealistic because of the inappropriate use of the emergency department, often generated feelings of anger and frustration, which are triggers of violence. Most of the verbal assaults were perpetrated by relatives and patients. A connection was observed among some characteristics of the aggressors that emerged from the quantitative data and the factors that favored violent incidents against triage nurses. Other studies exploring the experience of emergency nurses have recognized long waiting times, crowding, nonurgent patients, and the nursing professionals' poor communication skills as precipitating factors of WPV.^{9,10,26} In line with a recent qualitative meta-synthesis, a recurring theme that emerged from our study was the resignation with which nurses consider violence an intrinsic and inevitable part of their triage activity.²⁸ The high frequency and repetitiveness of violent episodes and difficulty in recognizing the cues for WPV along with the perception of being inadequately protected at work, induced nurses to experience feelings of helplessness and vulnerability. Triage is seen as a dangerous activity, to be carried out in solitude and at the forefront, providing responses to the problems and requests of the public.²⁸ Furthermore, our respondents felt that WPV was influenced by the poor cultural and social image of nurses and nursing, which is also often the result of projection in the media.¹⁰ From the data of our survey and focus groups, we found that nurses consistently reported high levels of psychological suffering for a long time after WPV.^{3,11} After an aggression, triage nurses also declared feeling frustration, anger, irritation, and disappointment, which eventually erodes their motivation and ability to work. Although participants confirmed their commitment to do their best at work, the consequences of violence can generate an attitude of defensiveness, indifference, and a decline in empathy, as suggested by our study. Some nurses also reported that repeated exposure to violence changed their domestic habits and their relationships with people, with repetitive avoidance behaviors in public and crowded places. Our results are consistent with those of previous research, highlighting the great suffering associated with WPV and the harmful effects of the exposure to violence on these health workers.^{26,28} On the basis of their personal experience, participants also suggested some solutions that could reduce and help them manage violent incidents. Our participants recognized the importance of training to ensure adequate communication with people who may be emotionally vulnerable because of illness, especially if affected by acute and severe psychiatric disorders. Therefore, as our participants stated, it is necessary to be aware that weak communication skills can increase conflict with patients and their relatives or caregivers, contributing to WPV development, as reported with Ramacciati et al¹⁰ Participants identified the need to improve community health care and set up specific clinical care pathways as a solution to WPV and the need for public information campaigns that raise awareness on how to make more appropriate use of emergency department health services. Participants also proposed the concept of a "waiting room nurse" and initiatives to promote the nursing image.

Limitations

This was a monocentric study that involved only triage nurses working in an emergency department; no other health care workers were involved. The strengths of this study are the use of valid quantitative measures and a solid qualitative approach, which allowed us to obtain a deeper understanding of the problems related to WPV among triage nurses. Further studies with adequate sample sizes are needed to confirm our results. In the light of our findings associated with the high prevalence of WPV, we hypothesize that a sample size of 70 nurses could ensure a confidence interval width of 0.20 under the hypothesis that the true prevalence is higher than 80%.

Implications for Emergency Nurses

The findings of this study highlight that triage nurses are excessively exposed to WPV, with a negative impact on their personal and professional well-being. In agreement with other studies and as reported by Wolf et al²⁶ that there is “an underlying normalization of this phenomenon,” we identified a suffering and silent acceptance of this problem. In fact, in a culture where violence is accepted as being “part of the job,”²⁷ the nurses included in our sample rarely reported the episodes of violence. As suggested by the Emergency Nurses Association, nurses have the right to personal safety at work, and the mitigation of WPV requires a zero-tolerance environment that is enforced and supported by the hospital leadership.²⁹ This is a complex phenomenon requiring a multidimensional strategy that entails local interventions and a global approach, starting from a major acknowledgment and awareness of the problem and coordinated action involving all the stakeholders. According to our participants, priorities for practice are the implementation of nursing organizational structures that reduce the long and stressful waiting times in the emergency department and specific care-pathways for certain categories of patients in the field of community care. Nurses demand more education and training that would help them prevent and manage violence and at the same time ensure higher recognition for the nurses’ role. Recently, the Italian National Federation of Nursing Regulatory Boards has launched a campaign to raise people’s awareness about the episodes of violence against health care workers and urged the government to enact laws that prescribe harsher sentences for aggressors. Finally, in agreement with international literature, the findings of this study underline the importance of introducing postviolence care services such as injury care, debriefing, and counseling for assaulted nurses.²⁹

Conclusions

Our results confirm that triaging is a high-risk nursing activity prone to violence, most frequently in the form of verbal abuse, primarily perpetrated by patients’ families or friends. Nurses reported significant consequences to their psychological well-being, ranging from feeling fear after a physical assault, to anger and irritation after verbal abuse. Participants identified several risk factors of violence, which is perceived as both a personal and an occupational injury. Unfortunately, the high frequency of episodes often leads triage nurses to consider violence to be an intrinsic and inevitable part of their work, which, together with the perception of insufficient organizational support, often generates a feeling of resignation in these professionals. For some professionals, the repeated episodes of violence have changed their way of working and their attitudes toward others even outside of their workplace. Triage nurses provide an instrumental front-office service to the public, where in addition to providing health care, they have to face pressing requests, problems caused by crowding and long waiting times, and deal with all the emergencies. There is still much to be done by all stakeholders to improve the safety and well-being of health care workers, starting from a shared awareness and taking on more responsibility in finding a better solution for a complex problem.

Author Disclosures

Conflicts of interest: none to report.

	Female nurses(n = 12)		Male nurses (n = 14)		Total	Fisher's exact test, or t-test	P value
n, or mean	%, or ±SD	n, or mean	%, or ±SD	n, or mean	%, or ±SD	Violent incident	
Type						3.29	0.20
Verbal	10	83.3%	14	100%	24	92.3%	Physical 0
0%	0	0%	0	0%	Physical and verbal	2	16.7% 0
0%	2	7.7%	Shift				
	1.96	0.37	Morning	3	25%	1	7.1% 4
15.4%	Afternoon	4	33.3%	4	28.6%	8	30.8% Night
5	41.7%	9	64.3%	14	53.8%	Place	
				5.89	0.10	Triag e rec eption	6 50%
3	21.4%	9	34.6%	Waiting room	0	0%	3 21.4%

3	11.5%	Area surrounding the triage	3	25%	7	50%	10	38.5%
Triage admission	3	25%	1	7.1%	4	15.4%	Activity that preceded the incident	0
					5.51	0.16	Conversion	0
0%	5	35.7%	5	19.2%	Patient/Companion made demands	2	16.7%	2
14.3%	4	15.4%	Patients assessment	5	41.7%	4	28.6%	9
34.6%	Physical care activities	5	41.7%	3	21.4%	8	30.8%	When the accident occurred

						5.32	0.28	Front office
3	25%	5	35.7%	8	30.8%	Admission	2	16.7%
5	35.7%	7	26.9%	During the wait	4	33.3%	3	21.4%
7	26.9%	During examination/treatment	3	25%	0	0%	3	11.5%
Discharge	0	0%	1	7.1%	1	3.8%	Feeling in advance that something was to happen	
					0.07	0.79	Yes	4
33.3%	4	28.6%	8	30.8%	No	8	66.7%	10

71.4%	18	69.2%	Worki ng alone when the incide nt occurr ed						
	2.37	0.13	Yes	7	58.3 %	4	28. 6%	11	
42.3%	No	5	41.7 %	10	71.4 %	15	57. 7%	Act ion	
						7.5 8	0.0 3	Ha ndl ed the situ atio n my self	
6	50%	9	64.3 %	15	57.7 %	Oth er(s) ca me to ass ist	5	41. 7%	
1	7.1%	6	23.1 %	Called for help and/or activated alarm	1	8.3 %	0	0%	
1	3.8%	No action necessary	0	0%	4	28. 6%	4	15. 4%	
Result							11. 54	<0. 01	

Physical injury	1	8.3%	0	0%	1	3.8%	No physical injury	2
16.7%	10	71.4%	12	46.2%	Fear	1	8.3%	0
0%	1	3.8%	Anger	5	41.7%	1	7.1%	6
23.1%	Irritation	2	16.7%	2	14.3%	4	15.4%	Sense of helplessness
1	8.3%	0	0%	1	3.8%	Disappointment	0	0%
1	7.1%	1	3.8%	Guilt	0	0%	0	0%
0	0%	Report						
2.62	0.57	No	8	66.7%	10	71.4%	18	69.2%
Incident reporting	2	16.7%	4	28.6%	6	23.1%	Work injury	1
8.3%	0	0%	1	3.8%	Police report	1	8.3%	0

	Verbal abuse		Physical and verbal aggression		Total	Fisher's exact test, or t-test	P value
n, or mean	%, or ±SD	N	%, or ±SD	n, or mean	%, or ±SD	Violent incident	
Shift						2.28	0.38
Morning	3	12.5%	1	50%	4	15.4%	Afternoon 8
33.3%	0	0%	8	30.8%	Night	13	54.2% 1
50%	14	53.8%	Place				
	1.26	1.00	Triage reception	8	33.3%	1	50% 9
34.6%	Waiting room	3	12.5%	0	0%	3	11.5% Are a surrounding the triage

9	37.5%	1	50%	10	38.5%	Tri ag e ad mis sion	4	16.7%
0	0%	4	15.4%	Activity that preceded the incident				
		3.04	0.30	Conversation	5	20.8%	0	0%
5	19.2%	Patient/Companion made demands	3	12.5%	1	50%	4	15.4%
Patients assessment	9	37.5%	0	0%	9	34.6%	Ph ysi cal car e acti viti es	7
29.2%	1	50%	8	30.8%	When the accident occurred			
			4.90	0.35	Front office	8	33.3%	0
0%	8	30.8%	Admission	6	25%	1	50%	7

26.9%	During the wait	7	29.2%	0	0%	7	26.9%	During examination/treatment
2	8.3%	1	50%	3	11.5%	Discharge	1	4.2%
0	0%	1	3.9%	Feeling in advance that something was to happen				
		0.35	0.53	Yes	7	29.2%	1	50%
8	30.8%	No	17	70.8%	1	50%	18	69.2%
Working alone when the incident occurred							3.67	0.17
Yes	9	37.5%	2	100%	11	42.3%	No	15
62.5%	0	0%	15	57.7%	Action			
			5.95	0.14	Handled the situation myself	15	62.5%	0
0%	15	57.7%	Other (s) came to assist	4	16.7%	2	100%	6

23.1%	Called for help and/or activated alarm	1	4.2%	0	0%	1	3.8%	No action necessary
4	16.7%	0	0%	4	15.4%	Result		
				14.01	<0.02	Physical injury	0	0%
1	50%	1	3.8%	No physical injury	12	50%	0	0%
12	46.2%	Fear	0	0%	1	50%	1	3.8%
Anger	6	25%	0	0%	6	23.1%	Irritation	4
16.7%	0	0%	4	15.4%	Sense of helplessness	1	4.2%	0
0%	1	3.8%	Disappointment	1	4.2%	0	0%	1
3.8%	Guilt	0	0%	0	0%	0	0%	Report
						6.78	0.20	No

17	70.8%	1	50%	18	69.2%	Inci de nt rep orti ng	6	25%
0	0%	6	23.1%	Work injury	0	0%	1	50%
1	3.8%	Police report	1	4.2%	0	0%	1	3.8%

DETAILS

Subject: Emergency medical care; Assaults; Lucid; Medical personnel; Workplace violence; Risk factors; Questionnaires; Verbal abuse; Violence; Nurses; Organizational support; Professional ethics; Men; Males; Patient safety; Focus groups; Consciousness; Confidentiality; Triage; Workplaces; Quantitative data; Perpetrators; Psychological well being; Nursing; Departments; Injuries; Friends; Emergency services

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Forensic Nurse Hospitalist: The Comprehensive Role of the Forensic Nurse in a Hospital Setting: JEN

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ABSTRACT (ENGLISH)

Forensic nursing is an evolving specialty designed to address the unique, intersecting health and legal needs of patients who are victims, suspects, and perpetrators of trauma. The “Forensic Nurse Hospitalist” is proposed as a new term to describe the role of the nurse who is qualified by licensure and education as a specialist in forensic nursing and practices specifically in the hospital setting. The forensic nurse hospitalist can provide comprehensive, medicolegal care to patients receiving treatment for trauma-related injury and questionable death in the acute care setting. The purpose of this paper is to highlight the need and importance of the forensic nurse hospitalist and describe the multifaceted responsibilities of the role as a transformational leader in health care today. It is vital that health care systems employ forensic nurse hospitalists to deliver expert patient care, offer specialized consultation and collaboration, and implement systemwide policy and educational initiatives to best meet the needs of patients who have experienced intentional or unintentional trauma.

FULL TEXT

Contribution to Emergency Nursing Practice

- Current literature on trauma indicates that health care systems should employ forensic nurses to help meet the health and legal needs of patients experiencing intentional and unintentional trauma and have forensic implications associated with their care.
- This article contributes to advancement of nursing practice by highlighting the emerging role of the forensic nurse hospitalist who has the ability to supplement the general role of ED providers when caring for patients with criminal involvement or liability-related conditions.
- Key implications for emergency nursing found in this article are the need, role, and responsibilities of forensic nurse hospitalists to best meet patient, health care provider, and health care system needs in the hospital setting. In addition, specialty education for emergency nurses is addressed.

Forensic nurses (FNs) receive specialized education that prepares them to provide care to patients who have been injured as a result of trauma, violence, or maltreatment.¹ They are further trained to offer medical-forensic care to perpetrators and those accused of inflicting trauma. Forensic nursing was designated as a nursing specialty in 1996. Over the last 20 years, the specialty has grown and evolved so that FNs now practice in a variety of subspecialties and in all levels and settings of care.¹

FNs in the hospital, particularly in the emergency department, emerged in response to the increasingly complex and interrelated health and legal needs of patients who experience intentional or unintentional trauma.¹ Despite this, differing models of care contribute to variability in the type and availability of FN services in these settings. FNs may be employed by community or hospital-based programs and staffed in-house or on call. Although both program types often began by providing care to patients who were sexually assaulted, some expanded their services to offer care to those experiencing intentional trauma (intimate partner violence [IPV], human trafficking, or child/elder abuse). Other programs have expanded further and provide comprehensive FN services to all patients who experience intentional or unintentional trauma. A hospital-based program that offers 24 hours a day, 7 days a week coverage and has an immediate response time exponentially increases the possibility of meeting the health and legal needs of patients who experience intentional or unintentional trauma. This structure, although ideal, is not the standard but is a model to emulate.

The purpose of this paper is to highlight the need and importance of the Forensic Nurse Hospitalist (FNH) and describe the multifaceted responsibilities of the role of the FNH as a transformational leader in health care today. Other terms for the FN have been used previously in the literature (FN examiner and FN specialist); however, these terms do not articulate the practice setting or frame of reference for this role. FNH is suggested as a new term that describes the dedicated, inpatient nurse who specializes in forensic nursing and practices specifically in the hospital setting. The FNH can supplement the general role of emergency nurses and physicians, as well as all health care providers, when delivering care to patients with criminal involvement or liability-related conditions. It is vital that health care systems implement an FNH program to deliver expert patient care, offer specialized consultation and collaboration, and implement system-wide policy and educational initiatives that best meet the needs of patients who have experienced intentional or unintentional trauma. Health care systems seeking to implement an FNH program should consult with experts in forensic nursing education and practice, who have knowledge and experience in comprehensive FN program development, implementation, and sustainability.

Trauma

Trauma may result “from an event, series of events, or set of circumstances that is experienced by an individual as

physically or emotionally harmful or life-threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being."² Traumatic events have the substantial likelihood of resulting in acute and chronic health and financial consequences for the victim and those directly or indirectly involved in the traumatic situation, including society and the health care institution.²

Trauma is the leading cause of death in the United States for persons aged between 1 year and 44 years, with 1 person dying every 3 minutes.³ Comparatively, for each injury-related fatality, 13 persons are hospitalized and 129 persons are treated in an emergency department for nonfatal injury.³ Each year, approximately 3 million persons are hospitalized, and 27 million are treated and released in US emergency departments because of violence and unintentional injuries.³ The total estimated lifetime medical and work-loss costs associated with fatal and nonfatal injuries in the US were \$671 billion in 2013, with fatal injuries costing \$214 billion and nonfatal injuries more than \$456 billion.⁴

In terms of interpersonal violence, 1 in 3 women and 1 in 6 men will experience some form of sexual violence (SV) in their lifetime.⁵ In 1 year, more than 100,000 females and 6,500 males were treated in an emergency department for nonfatal injuries sustained from sexual assault.⁶ At least 1 in 5 women and nearly 1 in 7 men will experience severe physical violence by an intimate partner during their lifetime.⁵ In a 3-year span, 112,664 persons were assigned codes related to IPV in US emergency departments.⁷

One in 10 Americans aged 60 years or older have experienced some form of abuse, with approximately 5 million elders abused annually.⁸ According to the Nationwide Emergency Department Sample, in 2012, more than 29 million persons aged 60 years or older visited US emergency departments, with 7,154 receiving an elder abuse diagnosis.⁹ In terms of child maltreatment, 678,000 victims were identified in 2018, with an estimated 1,770 deaths related to abuse and neglect.¹⁰ In one study, 778,843 US children aged 0 to 3 years received a diagnosis suggestive of maltreatment, and 60,567 received a diagnosis specific to maltreatment.¹¹

Furthermore, incidents of workplace violence (WPV) perpetrated against health care providers contribute significantly to intentional trauma, with incidents 4 times higher in health care than in other private industries.¹² Emergency departments are among the highest risk areas for WPV owing to crowding, public access, long wait times, and the possible presence of weapons.¹² In its position statement, the Emergency Nurses Association stated, "Acts of workplace violence can cause physical and/or psychological harm to emergency nurses leading to job dissatisfaction, emotional exhaustion, burnout, secondary trauma stress, PTSD, absenteeism, and intention to leave the job or nursing profession."^{12(p. 354)} These negative consequences to health care providers, in turn, can impact patients unfavorably.

National Recommendations Addressing Trauma

Healthy People 2020 has a national health goal to prevent unintentional injury and violence and reduce their consequences.¹³ There are 65 objectives relating to injury and violence prevention, including reducing fatal/nonfatal injuries, fatal/nonfatal child maltreatment, IPV, SV, children's exposure to violence, homicides, fatal/nonfatal firearm injuries, and nonfatal self-harm injuries.¹³ This is critical because injury and violence have been recognized as 2 of "the top 15 killers for Americans of all ages."¹³ In addition, the US Preventive Services Task Force (2014)¹⁴ and Health Resources and Services Administration¹⁵ recommend screening for IPV at least annually with referral to interventional services for women who screen positive in the health care setting.

The Agency for Healthcare Research and Quality¹⁶ recommends that health care providers adopt a trauma-informed care (TIC) approach to the evaluation and management of patients who have experienced traumatic events. TIC is built on 4 main principles: realizing the prevalence and impact of trauma; recognizing the signs and symptoms of trauma; responding through increasing knowledge on trauma, policies, procedures, and practices; and resisting

revictimization actively.¹⁶

A position statement by the Emergency Nurses Association emphasizes that patients who present to the emergency department with trauma often have forensic implications associated with their care.¹⁷ According to the statement, the emergency nurse caring for “a patient having suffered an act of violence or trauma is responsible for accurate documentation, evidence recognition, and collection, as well as preparation for testimony in a potential court proceeding ...whenever possible, a forensically skilled nurse should be among the team caring for a patient requiring forensic evidence collection in the emergency setting.”¹⁷ The American College of Emergency Physicians¹⁸ further supports FNs in the hospital setting, emphasizing that the collection of forensic evidence should be conducted by specially educated personnel.

Forensic Nursing

“Forensic” is defined as “relating to, used in, or appropriate for courts of law or for public discussion or argumentation.”¹⁹ As a specialty, forensic nursing is recognized as the provision of care when there are legal considerations associated with the patient’s health needs.¹ FNs receive specialized education in the evaluation and management of patients affected by intentional or unintentional trauma. This includes, but is not limited to, care of patients who are victims, suspects, or perpetrators of gunshot wounds, stabbings, poisonings, motor vehicle collisions, falls, SV, human trafficking, IPV, physical assault, child abuse, elder abuse, attempted suicide, death, and man-made catastrophe or natural disaster (ie, acts of terrorism, active shooters, fires, and floods).¹

FNs are further educated in the provision of trauma-informed, victim-centered care.²⁰ They are skilled in examining and considering the physical and psychological needs of victims of trauma as well as understanding how social, financial, and legal circumstances intersect and impact the coordination of care for patients who have experienced intentional or unintentional trauma.¹ FNs have a unique skill set that is not routine to other health care providers. This includes the ability to conduct a medical-forensic examination, accurately identify and document injury, engage in medical-forensic photography, collect evidence and maintain chain of custody, and testify in a court of law.¹ FNs are part of an interprofessional medical-forensic team that includes members of health care, law enforcement, the legal system, and the social system, with the goal of providing a coordinated response that best meets the needs of patients affected by intentional or unintentional trauma.¹ Although FNs are traditionally recognized as providing care at the tertiary level to individuals, families, communities, and health care systems that have experienced intentional or unintentional trauma,²¹ the ability of the FN to engage in interventions at the primary (prevention) and secondary (screening) levels is critical to improving individual and population health.¹

The Forensic Nurse Hospitalist

A “hospitalist” traditionally refers to a physician who practices exclusively in the inpatient setting.²² Hospitalists provide care to patients for the duration of their hospitalization, lead the health care team, and coordinate care in the inpatient setting. This role emerged as a result of physicians who had competing responsibilities that included managing hospitalized patients as well as those in a clinic or outpatient practice. The hospitalist role allows for physicians to focus wholly on improving the delivery of care to hospitalized patients with increasingly complex health care needs.²²

The FNH, similarly, is a dedicated, inpatient nurse who provides expert care, coordination of services, and leadership in the hospital setting specific to patients who have experienced intentional or unintentional trauma and have forensic implications associated with their care. The FNH Conceptual Model (^{Figure}) was developed to illustrate the 3 pillars of influence impacted by the FNH role: patients, health care providers, and health care systems.

Three Pillars of Influence Pillar 1: Patients

The FNH responds to all patients presenting to the hospital with intentional or unintentional trauma to develop a plan

of care that best meets their health and legal needs.¹ This may begin with screening and identification of affected patients (eg, victims of IPV, child or elder maltreatment, or human trafficking) as these individuals may not always present with an acute injury, disclose their history of violence, or even recognize that they are victims of trauma. Therefore, the FNH may need to assess for other indicators of suspected violence or abuse, including reviewing laboratory findings for the presence of drugs or toxic substances and evaluating other diagnostic tests for evidence of use of force or violence that may be overlooked by nonforensic health care providers. Once a patient with forensic implications is identified, the FNH may conduct a medical-forensic examination that includes the medical history, head-to-toe assessment, medical-forensic photography, recognition and collection of forensically significant evidence, and precise documentation of the patient's statements essential for the protection of the patient's legal and human rights.¹ It is the FNH's responsibility to educate the patient regarding their condition and offer referrals for services in the medical, emotional, safety, and legal arenas that are critical in interrupting the cycle of violence.¹ The body of a patient who is associated with trauma, whether a victim, suspect, or perpetrator, is a crime scene. Failure to recognize forensic implications related to the patient's care can have significant negative consequences on future litigation. A lack of forensic knowledge or mishandling of evidence can lead to a miscarriage of justice.²³ FNs contribute significantly to the criminal justice system. According to Schmitt et al,²⁴ sexual assault patients who received care from an FN were more likely to report the crime to law enforcement. In addition, there was an increased likelihood of charges being filed against the accused, an increase in convictions, and a higher average sentence in comparison with cases handled by non-FNs.

Moreover, the FNH is knowledgeable regarding inpatient and community-based resources that support the physical and psychological healing and safety of the individual.¹ The patient may be in need of temporary housing in a shelter or legal aid for court proceedings. The patient may need assistance in obtaining an order of personal protection or free counseling and mental health support. The FNH is an important liaison for these resources.

Patients affected by intentional or unintentional trauma present to the hospital with a complexity of needs requiring specialized knowledge, significant time, and the integration of multiple resources and disciplines.²⁵ Health care providers inadequately prepared to provide TIC may feel inept or burdened when caring for victims of trauma. This may contribute to the patients' feelings of helplessness or hopelessness.²⁵ Engaging in TIC is essential in preventing further harm or revictimization and empowers the patient to be a partner in their recovery process.¹ FNs are well-versed in providing TIC; therefore, the patients are more likely to feel validated and develop a therapeutic relationship with their nurse and other members of the medical-forensic team.²⁵

Pillar 2: Health Care Providers

The FNH can support health care providers through specialist consultation and collaboration while providing treatment recommendations that best meet the unique needs of patients who have experienced intentional or unintentional trauma.¹ This may occur during triage and admission, or in the inpatient setting when the patient discloses the liability-related circumstances surrounding their hospitalization. FNH consultation is important in these instances as the care of patients affected by trauma with forensic implications is not traditionally part of health care provider education. In fact, providers must generally seek out this specialized knowledge independently and in addition to their academic degrees.²⁰ Of the almost 3 million nurses in the US,²⁶ approximately 5,000 are members of the International Association of Forensic Nurses.²⁷ Although not all nurses affiliate with a professional organization, the number of nurses that identify as FNs is clearly small. In addition to the lack of education in forensic-related health care, the time required to complete medical-forensic services (examination, photography, and evidence collection) is an enormous obstacle when concurrently providing care to the high volume of patients seen in an emergency department.²⁸ Having a dedicated FNH with the education and ability to provide care to

patients who have experienced intentional or unintentional trauma allows health care providers to focus their care on other critical patients in need of generalist care.

Patients with forensic implications further require the health care provider to liaise with a number of interprofessional, community-based agencies.¹ This includes working with law enforcement and/or state protective agencies when a mandated medical report of violence, abuse, or neglect is warranted. Coordination with social work or other support agencies may then be necessary to ensure follow-up services are in place while victims navigate the legal and criminal justice system and transition to safety.¹

In terms of death, health care providers must understand the complexities of the medical examiner (ME)/coroner and death investigation systems to ensure individual, family, and community expectations are met even after death.¹

Communication must occur with the ME's office to provide details of reportable, hospital-related death. Coordination with tissue and organ donation agencies must take place so that the patient's end of life wishes are honored.

Throughout the process, the FNH can ensure that reporting processes are followed, effective communication with the next of kin is achieved, and legal implications associated with the death are addressed. FNs are viewed as the "effective cornerstone of these medical, social, economic, and litigious relationships."²³

Pillar 3: Health Care Systems

The FNH can assist health care systems through a variety of measures that guide health care provider practice during the care of patients with forensic implications, beginning with policy development.¹ The policies must follow professional guidelines as well as relevant state laws governing practice. The policies should be patient-centered and must be developed through a trauma-informed lens. Important policies to consider are those that direct health care providers on conducting a medical-forensic examination, including identifying, preserving, collecting, and maintaining chain of custody for evidence.¹⁷ In addition, a policy pertaining to the performance of medical-forensic photography is important and should include a clearly defined process for taking, securing, accessing, retrieving, and sharing images.²⁹ Additional policies pertaining to mandated reporting of cases of SV, IPV, human trafficking, child maltreatment, and elder/vulnerable adult maltreatment are critical in terms of patient support and safety.

The FNH can further assist health care systems by leading educational initiatives developed for onboarding and annual competency.¹ Topics may include content that is not part of health care provider academic curriculum or new and emerging standards or guidelines in the care of patients who experience intentional or unintentional trauma, such as strangulation, injury identification and documentation, screening of vulnerable populations, TIC, or the neurobiology of trauma. After the implementation of educational offerings, competency can be evaluated by the FNH through peer review and chart audit to ensure best practice is followed.¹

Support of the health care system can continue through FNH participation on hospital-based, system-wide, and community-driven committees tasked with improving the coordinated response to patients affected by intentional or unintentional trauma.¹ The FNH is an important liaison for the health care system in terms of collaborating with important community agencies and partners, such as the crime laboratory, to ensure that best practices surrounding evidence collection are met. The FNH can serve the community of interest via educational presentations and community outreach endeavors geared toward preventing trauma.¹

FNHs may consult with the in-house legal and risk management team to help identify and address actual and potential safety events involving patients, visitors, and staff.¹ Furthermore, the FNH's involvement with the hospital's morbidity and mortality review board is important to help recognize areas in need of improvement in terms of quality and safe practice. A limitation to these processes is that only inpatient events are captured; opportunities to review death occurring shortly after discharge are missed. Therefore, the FNH must participate in similar review boards at the city and/or county level. This allows for the possibility of linking recent/past hospitalizations with avoidable death.

Drake et al³⁰ studied the result of a collaborative relationship between a medicolegal death investigation agency and an acute care agency. The autopsy results of 186 decedents were reviewed by an FN and were identified to have patient safety or quality outcome implications related to the deaths: 31 were a result of missed diagnoses, 12 from misdiagnosis, 12 were related to therapeutic complications, 25 were suicides 72 hours postdischarge, and 106 were “failure to report” or “failure to recognize” the death as having medicolegal implications. The FNH can serve as a liaison to the ME’s office and as a member of the hospital quality and safety committee to perform chart audits, focused education, and policy and practice changes on otherwise missed opportunities.³⁰

Implications for Emergency Nurses

Health care systems should first evaluate the FN model of care available to support their organization. The consideration may include program type, patients served, and services provided. Two common models are community- and hospital-based programs. With community-based programs, patients may need to be evaluated and treated at the FN program’s facility. This may require the patient to travel a significant distance to another location once screened and discharged from the emergency department. Community programs that do provide patient evaluation in the hospital setting may require a contract or special privileges agreement to enter the health care system and provide patient care. Another important factor is the response time of the FN in a community program if they are traveling from an off-site location. If the FN is not available for immediate response, evidence may be lost and injuries missed if repaired before an FN examination. With hospital-based programs, the FN is often an employee of the organization, with the program housed and administered in the emergency or trauma department. In-house, 24-hours-a-day, 365-days-per-year coverage is recommended because “on call” staffing models may also lead to a delayed response and the aforementioned issues.

The types of patients treated are dependent on the education of the FN and the services offered by the FN program. Both community and hospital-based programs often began by providing care to patients who were sexually assaulted. Some programs expanded their services to offer care to other patients who have experienced intentional trauma (IPV, human trafficking, and elder or child maltreatment), whereas other programs have expanded to offer FN services to all patients experiencing intentional or unintentional trauma with forensic implications.

With specialty education in forensic nursing, the emergency nurse is in an excellent position to assume the FNH role. The education may begin with participation in a conference or seminar. This method generally provides information that is specific to 1 FN subspecialty (eg, sexual assault or child abuse); therefore, the content may be limited. Furthermore, clinical training that complements the didactic component is provided rarely. A more comprehensive FN education that includes clinical experiences may be obtained through an academic program that offers a certificate (undergraduate, postbaccalaureate, postgraduate) or a graduate nursing degree (Master of Science in Nursing or Doctorate of Nursing Practice) with a concentration in forensic nursing.¹

FNs possess unique knowledge that allows them to provide specialized care to patients who are victims, suspects, or perpetrators of trauma.¹ The FNH, as an expansion of the FN role, is able to best meet the complex and interrelated health and legal needs of patients who have experienced intentional or unintentional trauma and are being evaluated in the hospital setting. The FNH, as a dedicated, inpatient resource, can further offer specialty consultation and collaboration with the interprofessional, medical-forensic team when developing a high-quality, safe, and effective plan of care for these highly vulnerable patients. Finally, the FNH can serve as an expert resource for health care systems in the development of policy and educational initiatives critical in providing optimal care for patients who have experienced trauma.

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Violence and Its Impact on the Emergency Nurse: JEN

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ABSTRACT (ENGLISH)

Description In 2002, the World Health Organization declared workplace violence to be a global epidemic with a negative impact on the retention of health personnel and delivery of health care.¹ The violence also results in significant economic, personal, and professional costs.¹⁻³ In the United States, the prevalence of workplace violence in the health care industry is 4 times higher than in other private industries.⁴ Ease of public access, crowding, long wait times, presence of weapons, and other factors make the emergency department a highly vulnerable area,⁵⁻⁹ especially where triage occurs.^{10,11} Emergency nurses and other ED staff are at serious occupational risk of experiencing workplace violence, including verbal and physical assaults.⁵⁻⁷ For these reasons, workplace violence has been recognized in many states as a violent crime.¹² Yet, at the time of this publication, only about 30 states have adopted laws that make it a felony to assault a registered nurse.¹³ Other ongoing legislative initiatives include the introduction of the "HR 1309: 1 Both definitions demonstrate that workplace violence manifests in myriad ways as emotional or verbal abuse, coercive or threatening behavior, or physical and sexual assault,⁴ and can involve consumers, providers, and organizations.¹⁵ The patient population (eg, active substance use), along with work schedule (ie, night shift) experience level, and younger age of the health care provider, are consistent risk factors for WPV.^{8-10,16-18} Acts of workplace violence can cause physical and/or psychological harm to emergency nurses leading to job dissatisfaction, emotional exhaustion, burnout, secondary trauma stress,

posttraumatic stress disorder, absenteeism, and intention to leave the job or the nursing profession,^{4,9,16-25} all of which have potential impacts on patient care due to nurses' decreased productivity, organizational commitment, and engagement.^{9,18,25-27} Workplace violence is seen as a contributing driver of poor nurse retention and recruitment, further exacerbating the nursing shortage and its costly consequences for health care organizations and their patients.^{4,18,20,25,27-29} Despite continued education, legislation, and research to increase awareness and understanding of the issue, emergency nurses are reluctant to report incidents of WPV because they believe it is not violence if they did not sustain an injury, reporting can be laborious and futile, patients are not seen as responsible because of their age or illness, and WPV is an expected part of the job.^{23,28} Different types of violence exist independently, overlap, and enable each other. Background To increase program effectiveness, it is recommended that a workplace violence prevention program include training; formal incident reporting procedures; administrative, environmental, and consumer risk assessment; physical design; and security components to address all types of violence.^{3,4,6,28,31-38} When establishing a WPV prevention program, WPV experts recommend health care organizations adopt a multi-faceted, collaborative, interdisciplinary approach that includes a variety of stakeholders, such as health care administrators, ED managers, clinicians and staff, law enforcement and security personnel, and specialty providers such as mental health practitioners.^{28-30,32,33,35,38} Given the crucial focus on prevention of workplace violence by patients, visitors, coworkers, and intimate partners, coordination and advocacy among employees, health care employers, managers, and nursing leadership is considered necessary for effective implementation of educational, administrative, behavioral, legislative, and engineering approaches necessary for mitigating workplace violence.^{3,4,33-35,37,38} Emergency nurses, with their high risk for experiencing WPV, can serve an integral role in all aspects of violence prevention, planning, monitoring, and reporting.

FULL TEXT

Description

In 2002, the World Health Organization declared workplace violence to be a global epidemic with a negative impact on the retention of health personnel and delivery of health care.¹ The violence also results in significant economic, personal, and professional costs.¹⁻³ In the United States, the prevalence of workplace violence in the health care industry is 4 times higher than in other private industries.⁴ Ease of public access, crowding, long wait times, presence of weapons, and other factors make the emergency department a highly vulnerable area,⁵⁻⁹ especially where triage occurs.^{10,11} Emergency nurses and other ED staff are at serious occupational risk of experiencing workplace violence, including verbal and physical assaults.⁵⁻⁷ For these reasons, workplace violence has been recognized in many states as a violent crime.¹² Yet, at the time of this publication, only about 30 states have adopted laws that make it a felony to assault a registered nurse.¹³ Other ongoing legislative initiatives include the introduction of the "HR 1309: Workplace Violence Prevention for Health Care and Social Service Workers Act" in 2019 and continued advocacy and evaluation of state-based felony reforms.

There are no standard definitions of workplace violence. The Occupational Safety and Health Administration defines workplace violence as "... any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site."¹⁴ The World Health Organization uses a broader global definition that encompasses "incidents where staff are abused, threatened, or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being, or health."

¹ Both definitions demonstrate that workplace violence manifests in myriad ways as emotional or verbal abuse, coercive or threatening behavior, or physical and sexual assault,⁴ and can involve consumers, providers, and organizations.¹⁵ The patient population (eg, active substance use), along with work schedule (ie, night shift) experience level, and younger age of the health care provider, are consistent risk factors for WPV.^{8-10,16-18} Acts of workplace violence can cause physical and/or psychological harm to emergency nurses leading to job dissatisfaction, emotional exhaustion, burnout, secondary trauma stress, posttraumatic stress disorder, absenteeism, and intention to leave the job or the nursing profession,^{4,9,16-25} all of which have potential impacts on patient care due to nurses' decreased productivity, organizational commitment, and engagement.^{9,18,25-27} Workplace violence is seen as a contributing driver of poor nurse retention and recruitment, further exacerbating the nursing

shortage and its costly consequences for health care organizations and their patients.^{4,18,20,25,27-29}

Despite continued education, legislation, and research to increase awareness and understanding of the issue, emergency nurses are reluctant to report incidents of WPV because they believe it is not violence if they did not sustain an injury, reporting can be laborious and futile, patients are not seen as responsible because of their age or illness, and WPV is an expected part of the job.^{23,28} Different types of violence exist independently, overlap, and enable each other. For example, relational WPV (bullying) may impede early recognition and management of the violent person because it contributes to nurses' burnout and emotional and physical fatigue.^{19,21,28} Similarly, organizations knowingly and unnecessarily exposing their workers to violent situations or allowing a climate of abuse, bullying, or incivility to thrive in the workplace (organizational WPV) can create an environment wherein relational and consumer violence are ignored, allowing the behaviors to continue without administrative intervention.^{10,19,27,29,30}

Researchers suggest an increased emphasis on improving the practice environment (eg, modifications to physical features to increase visibility or use of patient alert flags) to facilitate adequate assessment, recognition, and shared communication to improve management of the potentially violent person. They also suggest adopting best practices, such as increased staff training in stress reduction, conflict resolution, simplified reporting, de-escalation, and behavior management skills, along with a focus on prevention and mitigation of all types of WPV rather than solely on post-incident response to and management of WPV sequelae.^{9,18,19,29-36}

ENA Position

It is the position of the Emergency Nurses Association (ENA) that:

1. Emergency nurses are at significant occupational risk of experiencing workplace violence.
2. The mitigation of workplace violence requires a zero-tolerance environment instituted and supported by hospital leadership.
3. Emergency nurses have the right to personal safety in the work environment.
4. Emergency nurses have the right to education and training related to the recognition, management, and mitigation of all types of workplace violence.
5. Emergency nurses have the right and responsibility to report incidents of WPV to their employer and law enforcement without reprisal.
6. Emergency nurses have the right to expectations of privacy, appropriate injury care, and the option for debriefing and professional counseling.
7. Protection against acts of violence include effective administrative, environmental, educational, and security components.
8. Emergency nurses advocate for adoption or continuation of state and federal legislation focused on the prevention of workplace violence and protection of emergency nurses.
9. Emergency nurses have a vested interest in, and a responsibility to conduct and participate in, research and quality improvement initiatives aimed at preventing, mitigating, and reporting all types and forms of workplace violence.

Background

To increase program effectiveness, it is recommended that a workplace violence prevention program include training; formal incident reporting procedures; administrative, environmental, and consumer risk assessment;

physical design; and security components to address all types of violence.^{3,4,6,28,31-38} When establishing a WPV prevention program, WPV experts recommend health care organizations adopt a multi-faceted, collaborative, interdisciplinary approach that includes a variety of stakeholders, such as health care administrators, ED managers, clinicians and staff, law enforcement and security personnel, and specialty providers such as mental health practitioners.^{28-30,32,33,35,38} Given the crucial focus on prevention of workplace violence by patients, visitors, coworkers, and intimate partners, coordination and advocacy among employees, health care employers, managers, and nursing leadership is considered necessary for effective implementation of educational, administrative, behavioral, legislative, and engineering approaches necessary for mitigating workplace violence.^{3,4,33-35,37,38} Emergency nurses, with their high risk for experiencing WPV, can serve an integral role in all aspects of violence prevention, planning, monitoring, and reporting. Underreporting is a documented barrier to effective identification and mitigation of workplace violence, although nurses do report incidents using both informal (eg, telling a supervisor or colleague) and formal channels, the latter being more likely when an injury is sustained.^{31,37,39} Studies have found that nurses' reluctance to report WPV involves fear of retaliation or dismissal from perpetrators—patients, colleagues or supervisors—or community members such as law enforcement.^{31,37,40} However, it may be intensified when there is a power imbalance (eg, a supervisor bullying an employee).^{25,27} Organizational commitment to reducing workplace violence—including workplace policies such as zero tolerance and the role of positive nursing leadership for establishing a nonpunitive just culture that discourages bullying and retaliation—is essential to mitigating all types and forms of WPV in emergency nursing and other health care environments; a just culture supports the nurse's right to privacy in reporting, injury care, debriefing, and counseling.^{19,22,25,27-29}

Further research is essential to determine effective prevention and mitigation strategies, educational priorities for nurse recognition of potential high-risk patients, and conditions for the proactive reduction of WPV. Reporting deficiencies, research design and methodology issues, and inconsistencies in definitions of violence (eg, threats, assaults, battery) make it difficult to evaluate and compare results across studies in the US and globally.^{3,7,25,41} Accurate risk surveillance, successful mitigation, and evaluation of workplace violence interventions will not be possible without standardized definitions, more rigorous data-driven studies, and improved incident reporting, making this an important focus for future workplace violence research.^{3,25,35-37,41}

Resources

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Drug Overdose, Loss of Consciousness, and Compartment Syndrome: A Life-Threatening Combination: JEN

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ABSTRACT (ENGLISH)

Acute extremity compartment syndrome is considered an orthopedic emergency that has serious consequences if a correct diagnosis is not made rapidly. Patients who lose consciousness due to a drug overdose are known to collapse onto their extremities. The limbs are compressed for hours, placing them at an increased risk for acute extremity compartment syndrome and its sequelae. Compartment syndrome due to a compression of a limb from loss of consciousness secondary to drug overdose, presents unique issues to health care providers. In the setting of overdose compartment syndrome, it is similar to the more common traumatic type of compartment syndrome with respect to the pathophysiology, diagnosis and treatment. However, it differs in relation to the muscles affected, physical assessment strategy, and accurately determining the amount of the time from onset of injury to the presentation of symptoms. The purpose of this article is to facilitate emergency department nurses' understanding of the complexities of overdose compartment syndrome, combined with the importance of early recognition of the condition. In addition, the authors review the pathophysiology, the traditional and innovative diagnostic techniques, and the current treatment options available for overdose compartment syndrome.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on compartment syndrome induced by limb compression from a loss of consciousness secondary to drug overdose indicates a paucity of primary research in the area.
- This article contributes to enhancing and developing, specifically in emergency nurses, the knowledge and skills to recognize and manage compartment syndrome in the conscious/semiconscious patient presenting with overdose.

••Key implications for emergency nursing practice found in this article are that the early recognition and diagnosis of compartment syndrome, identification of those at risk of developing compartment syndrome, and the knowledge of the major differences between compartment syndrome in the unconscious patient presenting with overdose and the other forms of compartment syndrome will contribute to reducing the incidence of misdiagnosis.

Introduction

Acute extremity compartment syndrome (AECS) is an orthopedic emergency that has serious consequences if not diagnosed rapidly and accurately.^{1,2} There is a paucity of published incidence rates for AECS. However, results from an 8-year retrospective chart review of 164 AECS patients in Edinburgh, Scotland, demonstrated annual incidence rates of 7.3 per 100,000 per year for men and 0.7 per 100,000 per year for women.³ AECS is associated most commonly with traumatic injuries such as fractures of the tibial shaft. Other etiologies include crush injuries from prolonged limb compression due to drug overdose, motor vehicle collisions, burns, external compression from casts, and snake bites.^{1,3-5} According to the Edinburgh study, more than half of the conditions that led to AECS are due to tibial diaphyseal fracture (36%) and soft-tissue injury (23.2%).

Patients who lose consciousness as a result of a drug overdose may lie on an extremity for a long period of time before they are found or regain consciousness.¹ The patients compress extremities beneath their body weight and are unable to relieve pressure by repositioning themselves. In this instance, a major concern is the duration for which the limb has been compressed. In a prospective study in Atlanta, GA, of 25 consecutive patients with closed tibial fractures, irreversible muscle ischemia occurred, on average, 8 hours after the onset of injury.⁶

When the patient's weight is removed from a compressed limb, an irreversible inflammatory response causes edema and sometimes bleeding, resulting in increased pressure within the closed muscle compartments and leading to AECS. Rapid recognition and diagnosis are vitally important in decreasing mortality and morbidity, because delays can result in contractures, limb paralysis, amputations, rhabdomyolysis, and death.^{1,2} The purpose of this article is to facilitate emergency nurses' understanding of the prevalence of substance use disorder in North America with the importance of the rapid identification of compartment syndrome due to a compression of a limb from loss of consciousness secondary to drug overdose (ODCS). In addition, the authors review the pathophysiology of compartment syndrome, describe diagnostic techniques, present a clinical algorithm, and describe the surgical treatment.

Background SUBSTANCE USE DISORDER IN NORTH AMERICA

According to Statistics Canada,⁷ 21.6% of Canadians (6 million people) met the criteria for having a substance use disorder at some point in their lifetimes. Substance use disorder is defined as a pattern of repeated use in which the individual fails to fulfill major societal roles, uses drugs in hazardous situations, has recurrent drug issues, and/or continues to use regardless of the social issues caused by drug use.⁷

The drugs most commonly abused in Canada are alcohol, marijuana, cocaine, amphetamines, "ecstasy," synthetic cathinones, and psychoactive prescription medications.⁷ The American Substance Abuse and Mental Health Services Administration (SAMHSA), monitors drug-related visits to the emergency department and drug-related deaths. In 2011, SAMHSA reported 2.5 million ED visits related to drug misuse and abuse.⁸ Of these, 1.25 million visits were due to illicit substances, and 1.24 million involved nonmedical use of pharmaceuticals.⁸ More recently, SAMHSA reported that 10.3 million Americans aged 12 years or older misused opioids in 2018.⁹

The abuse of psychoactive prescription drugs such as opioids, sedatives, and tranquilizers is a major public health and safety concern in North America; 80% of the world's prescription opioids are consumed by Canadians and Americans.¹⁰ The dramatic increase in fentaNYL abuse has become a public health crisis in British Columbia,

Alberta, Ontario, and Quebec.¹¹

According to Canadian data, there were 665 deaths from fentaNYL abuse between 2009 and 2014.¹¹ It is difficult to determine the number of fentaNYL users who have not died. The Centers for Disease Control and Prevention (CDC) in the United States have estimated that for every drug overdose death (72,000 in 2017 or 197 every day), there are 10 treatment admissions for abuse and 32 ED visits for abuse of prescription pain killers. This amounted to 2.3 million ED visits and approximately 720,000 treatment admissions in 2017.¹²

SAMHSA and CDC do not record the number of cases of ODCS in their reports. However, their reports demonstrate that substance use disorder is increasing throughout North America. On the basis of the North American data, it is reasonable to infer that an increase in substance use disorder will lead to an increase in the incidence of ODCS in the emergency department.

DRUG OVERDOSE, LOSS OF CONSCIOUSNESS, AND ODCS

Most cases of compartment syndrome are associated with tibial fractures. The development of ODCS is similar to other forms of AECS in relation to the pathophysiology, diagnosis, and treatment. ODCS differs from the other types of AECS in that it often develops in the gluteal muscle compartment from prolonged immobilization.¹³

A major concern with comatose patients is the determination of the duration for which they have been immobilized because they are unable to state when they lost consciousness. Not knowing the onset of the injury can have negative consequences, because the success of ODCS treatment is time dependent.¹³ The National Trauma Data Bank is the largest repository of trauma data in the US. In a retrospective review of data (2002-2006), the investigators examined the outcomes of patients with lower extremity injuries (n = 612) who had early or delayed fasciotomies. Those who had surgery in less than 8 hours from the onset of injury compared with those who had surgery in more than 8 hours had lower rates of amputation, infection, and length of stay.¹⁴

An equally important concern in not knowing the duration of immobilization in ODCS cases is the development of life-threatening sequelae, including a serious condition known as rhabdomyolysis that leads to acute renal failure and cardiac dysrhythmias.^{15,16} The average time from the onset of injury to an accurate ODCS diagnosis is 13 hours. In addition, drugs such as heroin and cocaine cause severe vasoconstriction that enhance ischemia, further compromising the compressed limb.^{15,17}

In summary, as a general rule, the greater the duration from the onset of injury to diagnosis, the more ischemia occurs leading to rhabdomyolysis. The pathophysiology of events in compartment syndrome is discussed more fully in the next section.

PATHOPHYSIOLOGY

The muscles, blood vessels, and nerves throughout the body are separated into specific compartments by inelastic fibrous connective tissue known as fascia.^{5,18} The muscle fascia have 3 biomechanical functions: muscle attachment, support of muscle groups, and increasing the mechanical benefits of muscles during contractions.⁵ There are 4 muscle compartments in the leg: anterior, lateral, deep posterior, and superficial posterior. The most common location for AECS is the anterior compartment containing the toe extensor muscles, tibialis muscle, tibial artery, and deep peroneal nerve.¹⁹ (For a detailed diagram, see:

https://en.wikipedia.org/wiki/Posterior_compartment_of_thigh#/media/File:Thigh_cross_section.svg.)

In limb trauma, the fascia prevents the muscle from expanding beyond its defined space, leading to increased pressure within the compartment.^{5,18} The normal intracompartmental pressure is 0 to 8 mmHg \pm 4 mmHg.²⁰ When there is sustained pressure (>30 mmHg), the muscle is damaged, and the cells lyse and release myoglobin, creatine kinase (CK), potassium, calcium, and oxygen free radicals into the circulation, causing life-threatening rhabdomyolysis. In addition, the release of cellular contents results in hypovolemia, hyperkalemia, acute renal

failure, and cardiac dysrhythmias^{1,16} The precise pathophysiological processes of compartment syndrome are unclear. However, it is hypothesized that the arteriovenous pressure gradient plays an integral role in its development.^{5,18} The injured muscles cause precapillary vasodilation in the arteriolar system, postcapillary venule collapse, and an increase in capillary basement membrane permeability, resulting in an increased filtration of fluid out of the vasculature into the interstitial space (Figure 1).¹⁸ Normally, the interstitial fluid pressure is less than 10 mmHg; however, as the pressure increases, tissue perfusion decreases, leading to hypoxia and accumulation of waste products such as lactic acid and carbon dioxide.

The combination of tissue hypoxia and an increase in oxidant stress from oxygen free radicals causes cellular edema.¹⁷ Hypoglycemia develops as the cells use excessive amounts of carbohydrates for anaerobic metabolism (Figure 2). Hypoxia, oxidative stress, and hypoglycemia result in a shortage of adenosine-triphosphate, leading to closure of the sodium-potassium channels that maintain cellular fluid and electrolyte balance as well as cellular electroconductivity.¹⁸

The closure of the sodium-potassium channels causes a loss of cell membrane potential, producing a flood of negatively charged chloride anions into the cell, resulting in cellular swelling and lysis (Figure 2). Cellular rupture causes an increase in tissue inflammation and damage. As pressure increases within the compartment, the blood vessels are compromised further, resulting in more tissue hypoxia. If ODCS is not recognized, a vicious cycle of events ultimately leads to rhabdomyolysis.^{5,18}

RISK FACTORS AND DIAGNOSIS

The major risk factors associated with compartment syndrome include being male, age less than 35 years, and having a fractured tibial shaft or crush injury. In addition, for ODCS, risk factors also include a known history of substance use disorder, which may lead to altered level of consciousness and limb compression (Figure 3).

There are several methods of diagnosing AECS, including recognition of the clinical manifestations, intracompartmental pressure measurement, near-infrared spectroscopy (NIRS), infrared imaging, intramuscular glucose (IMG) monitoring, and direct measurement of tissue oxygenation (DTO). Currently, clinical assessment and intracompartmental pressure measurement are the most common methods for making a diagnosis. The use of the newer techniques of NIRS, infrared imaging, IMG monitoring, and DTO are not the norm in clinical practice.^{2,5,21,22}

Clinical Manifestations

Traditionally, clinical observation and neurovascular assessment are used to diagnose compartment syndrome. The most common clinical manifestations are pain, pallor, pressure, paresthesia, pulselessness, and paralysis, together known as the 6 P's.^{5,21,22} Pain out of proportion to the injury and pain on passive stretching are the most common and reliable signs; paresthesia, pulselessness, and paralysis are all late manifestations.^{5,21,22} However, the 6 P signs and symptoms are present in other orthopedic conditions too. Moreover, the symptoms are difficult to assess in unconscious patients, those under the influence of drugs or alcohol, those with severe dementia, and young children.⁵

In a systematic review, Ulmer²² calculated the overall sensitivity and specificity of using clinical findings to diagnose compartment syndrome. He found a low sensitivity (13%) and a high specificity (97%). Sensitivity refers to the probability of having a positive test, given that the disease is present truly. A sensitivity of 13% means that if 100 patients truly had compartment syndrome, only 13 would have positive findings. In other words, only relying on clinical signs and symptoms to detect AECS (when it is truly present) is not a very reliable way to diagnose the condition.

Conversely, specificity refers to the probability of patients having a negative test given they truly do not have the condition. A specificity of 97% means that if 100 patients truly did not have AECS, 97 would have a negative test.

Therefore, the absence of clinical findings is more helpful in excluding the disorder rather than determining its presence.

Clinical findings alone are not reliable indicators in diagnosing AECS, particularly with ODCS, because patients with an altered loss of consciousness are unable to communicate their symptoms. In current practice, AECS is diagnosed using a combination of clinical findings and an ICP monitor.²¹

Intracompartmental Pressure Monitoring

Intracompartmental pressure monitoring, the most common diagnostic tool used, involves the insertion of a slit catheter, which is connected to a continuous pressure transducer, into the compartment.^{21,22} Intracompartmental pressure monitors are useful in diagnosing ODCS in those patients who are unable to communicate their symptomology.^{1,5,22} The perfusion pressure in a compartment is known as the delta pressure. The delta pressure is calculated by subtracting the intracompartmental pressure from the diastolic blood pressure. If the delta pressure is ≤ 30 mmHg for more than 2 hours, a diagnosis is confirmed.^{1,5,23}

In a chart review of patients with a tibial fracture ($n = 1,184$), very positive results were found for intracompartmental pressure monitoring as the authors computed 94% sensitivity, 98% specificity, 93% positive predictive value, and 99% negative predictive value.²² Other diagnostic tools are being investigated, including NIRS, infrared imaging, IMG monitoring, and DTO.²⁴⁻²⁶ However, a clinical assessment combined with intracompartmental pressure monitoring remains the most common diagnostic approach.

TREATMENT Fasciotomy

The standard treatment for all types of compartment syndrome is emergent fasciotomy.^{5,18} Fasciotomies involve 1 or more incisions into the fascia to release the pressure on the muscles and other tissues. Tissue necrosis can occur within 6 to 12 hours of the onset of hypoxemia. The patients have better outcomes and fewer complications when a fasciotomy is performed within a 6-hour to 12-hour time frame.^{14,18}

According to the Calgary treatment guidelines for compartment syndrome,²⁶ there are 5 fasciotomy techniques used by surgeons, depending on the location of the compartment syndrome and the surgeon's preference. The 5 types are single- and double-incision leg, thigh, upper extremity, and foot fasciotomies. There are several important principles in performing a successful fasciotomy, including adequate length, depth, and landmarking of incisions; full release of the muscle compartment; avoidance of injury to underlying structures; debridement of ischemic and necrotic tissue; dressing changes every 24 to 72 hours; skin grafting; and wound closure (Figure 4).^{5,26}

Fasciotomies aim to restore tissue perfusion; however, a delay in the closure of incisions is associated with increased morbidity, hospitalization, and treatment costs.²⁷ If irreversible necrosis occurs before a fasciotomy is performed, patients are at increased risk of infection, as the bacteria from the necrotic tissue can translocate into the blood.¹⁸

Implications for Emergency Nurses

Emergency nurses have an important role in the early recognition and diagnosis of compartment syndrome as they are often the first health care providers to come into contact with patients.^{27,28} Owing to the significant increase in individuals affected by the opioid crisis,⁹ emergency nurses have a professional responsibility to identify those at risk. Their knowledge of this condition, together with their assessment skills related to the major differences between ODCS and other forms of AECS, will contribute to reducing the incidence of misdiagnosis. Moreover, they need to appreciate the importance of intracompartmental pressure monitors and timely communication with a surgeon regarding their concerns for AECS.

One practical approach to facilitate identification of AECS is in the use of clinical algorithms. Algorithms provide nurses with a step-by-step process to assess patients systematically and report their concerns (Figure 4). Given an

increased clinical suspicion for compartment syndrome, the other tests to consider are complete blood count, chemistry panel, coagulation study, CK, urinalysis, and urine myoglobin. Knowledgeable registered nurses are vital to improving patient outcomes and decreasing the risk of complications in patients with AECS.^{1,27,28}

Conclusion

Compartment syndrome is a surgical emergency that must be recognized and diagnosed rapidly to avoid life-altering complications and, in some cases, death.^{1,2} The most common presentation of AECS is due to a fracture of the tibia. There is a paucity of data in relation to the incidence of ODCS; however, it is reasonable to infer that with the increase in substance use disorder in North America, there will be more cases of patients being found unconscious with ODCS who are brought to the emergency department.

ODCS is similar to the traumatic forms of AECS with respect to the pathophysiology and treatment. However, the presentation of ODCS is quite different in that the gluteal muscle compartment is affected generally. On physical examination, the nurse should assess for tenderness, swelling, and firmness over the gluteal muscles. Emergency nurses have a significant contribution to make in decreasing the rates of misdiagnosis by having an increased level of clinical suspicion on the basis of the patient's history and presentation. It is important to make every effort to estimate the amount of time from the onset of injury to presentation in the emergency department.

The prompt diagnosis and treatment of all forms of AECS continue to remain a major issue in health care, resulting in it being one of the most highly litigated conditions in orthopedics.⁵ The authors have provided an overview of AECS, ODCS, the pathophysiology, the diagnostic approach, and the current treatment options available. In addition, a practical algorithm designed to improve the accurate assessment and diagnosis of ODCS by emergency nurses was presented.

Author Disclosures

Conflicts of interest: none to report.

DETAILS

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Intimate Partner Violence Screening in the Emergency Department: A Quality Improvement Project: JEN

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ABSTRACT (ENGLISH)

Introduction

Intimate partner violence is a serious public health issue that can be addressed through identification and early

intervention. Although screening for intimate partner violence in health care settings is recommended by medical and nursing organizations, it is underperformed. The project objectives were to increase intimate partner violence screening rates, identification, and the referrals/resources provided.

Methods

This project was a quality improvement intervention. Intimate partner violence screening training was provided to emergency nurses along with a computer prompt for screening in the emergency department, with a standard referral process to a social service agency. The project data included patient ED visits, partner violence screening rates, positive and negative screening rates, and the number of referrals/resources provided to the patients.

Results

There was no increase in the screening rates (28%). Although the screening rates varied considerably from week to week, the highest rate of screening was during the intimate partner violence training week. Pre- and postintervention data showed a significant increase in the number of positive screens obtained per week after the nurse intimate partner violence training (7.80 vs 5.22, $t = -4.33$, $P < 0.01$). In addition, the referrals/resources provided to the patients doubled from 9 to 18 after the training, which is clinically significant for patient care.

Discussion

This project demonstrates that nurse training along with a computer prompt intervention and standard referral process can contribute to intimate partner violence identification and the referrals/resources provided to the patients. Ultimately, the patients exposed to partner violence may benefit from increased identification and delivery of the referrals/resources.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on intimate partner violence indicates that routine emergency department screening is underperformed.
- This article contributes the finding that when more patients were screened, more intimate partner violence was identified and referrals/resources were doubled.
- Key implications for emergency nursing practice found in this article are that a computer prompt and nurse education interventions can have a significant impact on the rates of positive intimate partner violence screening.

Introduction

Intimate partner violence (IPV) impacts Americans in all stages of life and is a serious public health concern. According to the Centers for Disease Control and Prevention,¹ IPV can occur between heterosexual or homosexual couples and refers to physical, psychological, or sexual harm perpetrated by a current or former partner/spouse. In the United States, approximately 1 in 4 women and almost 1 in 10 men report experiencing physical violence, sexual violence, and/or stalking from an intimate partner during the course of their lives.¹ Approximately 20% of women (1 in 5) and 8% of men (1 in 12) have encountered sexual violence incurred by an intimate partner.¹ During the course of their lives, approximately 24% of women and 14% of men report experiencing severe physical violence by an intimate partner, and almost half of US women report experiencing psychological aggression.^{1,2} Among individuals who identify as lesbian, gay, bisexual, transgender, or queer (LGBTQ), the rates of IPV are identified as at the same level as or above the IPV rates of their heterosexual peers.³ In addition, transgender individuals seem to be at a higher risk for IPV than their LGBTQ cisgender peers. In the geriatric population, the rates of IPV are estimated to be between 2% and 25%.⁴ Myths and cultural attitudes regarding older adults can lead to decreased awareness of IPV among health care providers.⁴ Teen dating violence, a risk factor of adulthood IPV, is substantial among teenagers, with 9% of girls and 7% of boys experiencing physical dating violence.¹ Moreover, a national survey of high school

students found that sexual dating violence occurred among 11% of girls and 3% of boys.¹ An estimated 15.5 US children are affected by exposure to partner violence in the home annually.⁵ IPV is a substantial health issue affecting the health of individuals who are exposed to violence.

The potential consequences of IPV for victims and their children are well established and multifactorial. The adverse effects of IPV on adult health include chronic pain, gastrointestinal disorders, hypertension, chest pain, sexually transmitted infections, anxiety, depression, posttraumatic stress disorder, substance abuse, and attempted or completed suicide.² Among IPV survivors, approximately 41% of women and 14% of men endure some form of physical injury related to partner violence.¹ Death is a real possibility for US women who experience partner violence, with almost half of female homicide victims killed by a current or former male intimate partner.¹ Survivors of IPV are at an increased risk of engaging in risky health behaviors such as binge drinking and smoking, as well as HIV-risk behaviors.¹ The negative health consequences to the adult may influence parenting abilities, resulting in poor outcomes for the child.^{6,7} Children who are exposed repeatedly to parental/caregiver IPV can exhibit symptoms of posttraumatic stress disorder, anxiety, emotional dysregulation, appetite dysregulation, decreased school performance, and/or impaired sleep.^{5,7,8} The longer the IPV ensues, the more likely it is to impact health. Multiple exposures to traumatic events in childhood are linked to dysfunction in childhood and later in life.^{8,9} When child maladaptive behavior exists, early recognition coupled with psychiatric intervention proves to be the best practice for children affected by chronic trauma, including partner violence.^{6,9} Studies indicate that a coexistence between IPV and child maltreatment is approximately 29% to 60%.⁵ This correlation demonstrates that routine screening is needed to identify and treat family violence. Therefore, IPV is a critical public health concern for adults and children that requires urgent attention.

The potential consequences of partner violence demonstrate the need to screen patients for IPV in health care settings, including the emergency department. Nurses have an important, integrative role in the identification of IPV. By routinely screening for IPV, nurses have the ability to decrease the potential negative health impact of partner violence.^{10,11} Early identification of adult IPV allows the nurse to intervene and refer for services, which may reduce the negative consequences for adults and children.^{10,11} Routine IPV screening in health care is recommended by many medical and nursing organizations.¹¹ IPV is the primary cause of injury seen in US health care settings for women between the ages of 16 and 44 years.² Women screened in the emergency department reported experiencing IPV at rates of 11% to 19% during the past year.² The emergency department is an area of opportunity to advance routine violence screening.¹²

A gap in care exists when patients are not being screened routinely as recommended in health care settings.¹² The objective of this project was to increase the ED screening rates, identification, and referral of patients impacted by IPV. The project's intention was to address the following clinical question, which was framed using the PICO (Problem/Patient/Population, Intervention/Indicator, Comparison, Outcome) model: In ED patients (P), does including a computer prompt, referral agreement, and nurse education intervention (I), compared with past standard care (C), increase the IPV screening rates, identification, and referrals in ED patients (O)?

Methods Project Design

This project was a quality improvement intervention that included a nursing in-service along with a computer prompt and referral agreement to promote and improve routine IPV screening. We tested the ED unit-level effectiveness of the intervention by comparing the unit-based pre- and postintervention weekly rates of screening, numbers of patients positively identified with IPV, and numbers of patients referred. The project took place over 9 weeks from November 2014 to January 2015. The project design included a baseline period of 4 weeks, a 1-week intervention period (week 5), and 4 weeks of postintervention measurement.

Setting

The project was completed in a 29-bed level I emergency department in an Arizona hospital that sees 40,000 patients per year, including more than 1,200 adult trauma patients. The computer prompt was activated at the beginning of week 5, the nursing in-service/IPV training week.

Existing Protocol

The standard pre-existing practice at the site, before the quality improvement project, included an IPV screening protocol. The protocol required face-to-face nursing verbal IPV screening using 3 items (discussed in detail in the following text) on all adults aged 18 years or older who accessed the ED services. The IPV screening questions were to be completed on the computerized triage form as part of the intake process. The questions were not to be modified by the nurses, although the in-service that was provided previously for the staff instructed them to engage the patient, develop a rapport, ensure privacy, and then perform the IPV screening. If the IPV screen was positive, a referral was to be made, and resources were provided.

IPV Screening Tool

The screening questions, which were already in place at the project facility, were as follows: 1) In the last year, have you been hit, kicked, punched, choked, or otherwise hurt by someone? YES/NO If so, by whom?; 2) Are you afraid of your partner? YES/NO; and 3) Is there someone making you feel unsafe now? YES/NO. Two of the 3 questions had been adapted previously from the Partner Violence Screen (PVS) tool, which has a sensitivity of 64.5% to 71.4% and a specificity of 80.3% to 84.4% (see ^{Figure 1} for PVS screen changes).¹¹ Owing to the patient population at the project site, the screening questions were adapted to a sixth grade reading level to increase patient comprehension (^{Figure 1}). The 3-item questionnaire for IPV screening was reviewed by the hospital's risk management personnel and representatives of the local Coordinated Community Response team for domestic violence and sexual assault and remained unchanged by the project team for the purposes of this quality improvement project.

Quality Improvement Project Team

The quality improvement project team consisted of health care providers in the hospital's evidence-based practice department, a trauma and quality assurance nurse, the emergency nurse manager, an emergency nurse (who was also a certified Sexual Assault Nurse Examiner), and a Doctor of Nursing Practice student. The hospital's risk management personnel re-examined the IPV screening procedure before project implementation. The "buy-in" of the charge nurses before the project implementation was sought through discussions with the project personnel and a local court judge who communicated the impact of IPV on the community to the emergency charge nurses at a monthly charge nurse meeting. The judge engaged the charge nurses in discussions on the consequences of partner violence, the cycle of violence, and the need to screen to identify victims. The project personnel felt strongly that if the charge nurses were not on board with the project, it would be less successful. Finally, to lessen the burden on the nurses when IPV was identified, a partnership with a local victim service group was used for all positive screens to facilitate patient-safety planning and resource referral.

Quality Improvement Interventions

The project aims were promoting the importance of routine IPV screening, training the emergency nurses on how to screen for IPV, and providing the nurses with an effective tool along with a computer prompt for IPV screening. The goal of the IPV training was to enhance the nurses' ability to screen routinely and respond to individuals exposed to IPV. The interventions included adding a computer prompt for IPV screening, nurse education, and a referral agreement. To promote the nurses' routine IPV screening and documentation, a computer prompt was implemented in the emergency department on the triage intake screen. This computer prompt, which was mandatory and could not be bypassed but could be exited, consisted of a pop-up screen that required completion by the nurses before the

next screen on the patient's intake record. The computer prompt, which was mandatory and could not be bypassed, consisted of a pop-up screen that required completion by the nurses before the next screen on the patient's intake record. The nurses were able to select the "unable to screen" option, which was intended for patients too critically ill or altered to screen (see ^{Figure 2} for an example of the screen). After completion, the IPV screening questions could be accessed easily through the main page on the patient's electronic medical record. In addition, the process was enhanced with an agreement with a victim service group. The victim service group agreed to be available 24 hours a day, 7 days a week for referrals and as a resource to nurses and patients exposed to IPV. The patient resource/service was an integral part of enhancing IPV screening in order to support victims of IPV successfully. The IPV nursing in-service was based on evidence of effective IPV screening and consisted of an in-person training video, a question/answer session, and a poster board.^{1,2,11} A 4-minute video was developed and approved by the team. The video's content consisted of the following items: the definition of IPV, the consequences of IPV for victims and their children, the recommendations and importance of routine IPV screening, how to screen for IPV, safety planning, and what to do/how to respond to a patient with a positive or negative IPV screen. Along with the information on what to do when IPV was identified, the video included content on a patient-safety assessment, exit plan, referral protocol, and resources. Because the emphasis of the training video was on the routine screening of all ED patients, red flags or signs of IPV victimization were not included. The poster board, which was placed in the ED break room, reinforced the key points of the video and provided additional references.

The IPV in-service video was delivered by the unit's charge nurse to all ED personnel during the staff shift meetings twice a day over a period of 7 days. The staff meetings occurred at change of shift—7 AM and 7 PM—and the nurses were required to attend. The video schedule was intended to reach approximately 13 nurses per day, out of a nursing staff of 75 nurses, with some nurses viewing the video more than once because of their schedules. The video was provided to all emergency nurses by the emergency nurse manager through hospital e-mail for future reference and to reach any nurses not present during the training. After the in-service training, discussions were held with the staff about potential difficult encounters, including role-play and scripting to prepare nurses for possible patient interactions.

Measures

The measures collected were the total number of patient ED visits, IPV screenings completed during these visits, positive IPV screens, and IPV referrals/resources provided to the patients.

Data Collection

The data were collected by chart review over a period of 9 weeks: 4 weeks before the IPV nurse training (baseline data), 1 week during the training (week 5), and 4 weeks after the in-service training (postintervention data). The data were compiled by weeks, Monday 12:01 AM through Sunday 12:00 AM.

Analysis

The data were analyzed using SPSS version 23 (IBM Corp, Armonk, NY). The descriptive statistics were analyzed. The differences in the variables between the pre- and postintervention periods were analyzed using independent samples *t* tests to compare the rates of IPV screenings completed, rates of positive IPV screens, and the number of referrals/resources provided to the patients before and after the IPV in-service along with the computer prompt.

Ethical Considerations

The hospital's internal review board deemed the project as exempt from review/not human research.

Minimal adverse effects have been found with routine IPV screening in health care.¹¹ The discomfort of the nurse to screen is the most common adverse effect.² There is no increased safety risk as long as the patient is screened alone.¹¹ Screening for IPV only when violence is suspected, or selective screening, limits the identification of victims

and children exposed to partner violence.^{11,12} Victims of IPV can experience negative impact on their health and a significant amount of anguish.² Routine IPV screening supports the ethical principle of beneficence by identifying at-risk patients and children.

Results

During the project period, from November 2014 to January 2015, more than 6,000 patients (N = 6,130) were seen in the emergency department. A total of 1,726 patients were screened for IPV over the 9-week period, for an overall rate of 28.15%.

Weekly IPV screening rates ranged from 21.5% to 38.7% (Table). During week 5, which was the week of the nurse in-service, the patients were screened at the highest rate of 38.7%. IPV screening rates did not increase as anticipated, with 28.41% of patients screened preintervention and 25.67% of patients screened postintervention. Although the intervention week resulted in the highest rate of routine screening, no increase in screening rates was seen after the intervention.

The identified rates of IPV were increased with positive IPV screening rates averaging 5.22% in the 4 weeks before the intervention and rising to 7.79% in the 4 weeks after the IPV in-service along with the computer prompt intervention (see Figure 3 for IPV positive screening rates). The weekly rate in the fifth week was excluded in the pre- and postintervention calculation of positive IPV screen rates and referrals/resources owing to the ongoing nursing in-service throughout that week. The 2 independent, 4-week samples (weeks 1 to 4 and weeks 6 to 9) of positive IPV screen rates demonstrated that the average weekly postintervention rate (mean [M] = 7.80) was significantly greater than the preintervention rate (M = 5.22) ($t [6] = -4.37$, $P d = -3.09$, 95% CI -5.78 to -0.35).¹³ On the basis of Cohen's 2009 guidelines, the effect size is considered large, with the lower limit of the CI interpreted as a moderate effect size.¹³

In addition, the raw counts of IPV referrals/resources provided to the patients doubled in the 4 weeks after the project intervention (see Figure 4 for IPV referrals/resources). There were 9 referrals/resources in the first 4 weeks preintervention compared with 18 referrals/resources in the last 4 weeks postintervention (Figure 4).

Discussion

The purpose of this project was to increase IPV screening rates and the referrals/resources provided to patients in the emergency department. The practice improvement project resulted in varying rates of IPV screening during the project weeks and an increase in both the rates of identified IPV and IPV referrals/resources provided to the patients after the intervention. This project adds to the literature on the effectiveness of implementing IPV screening in the ED setting. Our results demonstrated that although the weekly rates of IPV screening were variable, the rates of positive IPV screens increased after a computer prompt, nurse education, and referral agreement intervention at our site. An increased number of patients exposed to IPV were identified, and the referrals/resources for IPV doubled after this project was implemented.

Our intervention addressed 2 commonly documented barriers to IPV screening in health care: lack of knowledge and discomfort.¹² The nurse education included examples of scripted statements and responses to a positive and negative IPV screen. Furthermore, the partnership and 24 hours a day, 7 days a week availability of patient/victim services supported routine IPV screening and likely lessened the burden on the nurse when a positive IPV screen was obtained.

The project could have been influenced potentially by the time of year at which it was completed in the emergency department. The project was completed during the holiday season of Thanksgiving, Passover, Christmas, and New Year's Eve and Day. Research shows that the number of IPV police reports increases during the Christmas holidays.¹⁴ The application of this project during the holiday season may have impacted the patients' disclosure rates

and willingness to accept the IPV referrals/resources.

An ethical consideration for this project is that the IPV screening was completed in the patient triage area. Because triage is designed for the rapid sorting of patients to connect them quickly with the correct resources, the IPV screening has the potential to burden the triage area, impacting the patient flow and the lifesaving clinical decision-making ability of the triage nurse. In addition, the evidence demonstrates that the development of rapport and trust can impact patient disclosure rates.¹² IPV screening done during the nurse's primary assessment or before discharge may support the nurse-patient relationship better. Moving the timing of the computer prompt to other timepoints in the ED care pathway may be beneficial.

Identifying the individuals exposed to IPV is the first step to safety planning and IPV intervention. Health care facilities are safe places for violence screening and allow for resources and referrals to be generated in a controlled environment.^{2,12} It has been acknowledged that emergency departments provide a unique opportunity to screen because of the 24-hour care and the frequency of visits after exposure to IPV.⁹ Too often in health care, screening is performed only when an injury associated with IPV is suspected.^{11,12} This type of selective screening, or screening only when IPV is suspected, fails to identify many individuals exposed to IPV.¹¹ Routine IPV screening and treatment can reduce the individual's exposure to violence and has been shown to improve health outcomes for women in specific population groups.² Screening and intervention have demonstrated improved outcomes for women, including increased safety planning, increased community connections, increased quality of life, and decreased exposure to violence.^{2,12} Screening all patients for IPV in the emergency department supports early IPV identification and intervention and has the potential to lessen the negative impact on the adult and child.^{9,12}

IPV Screenings

The number of patients screened varied per week, with the highest rate of 38.7% during the IPV intervention week. The intervention week may have influenced the nurses' ability and motivation to screen routinely along with the newly implemented computer prompt that reminded the nurses to screen. The factors that likely affected the screening rates were patient acuity, the staffing rate, and the individual nurses working at the time. IPV screening rates differ substantially per institution and setting. Trinkley et al¹⁵ identified 1 of the highest IPV screening rates at 88% in rural hospital emergency departments. The organizational factors that influence both routine screening and patients' disclosure rates are lack of privacy, lack of social services, and lack of time.¹² To promote universal screening, it is imperative that nurses are well trained on screening, and clear referral pathways are in place.¹² The recommendations to increase universal screening at the project site include biyearly IPV nurse training, consisting of resources/referral information, promotion of the site's IPV screening protocol, and routine chart audit feedback. Missed opportunities to screen in the emergency department can lead to a lack of intervention for victims and families.¹⁶ Routine IPV screening has the potential to mitigate the negative health impact of partner violence and counteract stigma.¹⁶ The knowledge on IPV screening would benefit from further research in males and the LGBTQ population.^{3,12} In addition, age and culturally appropriate IPV questions should be applied to ED settings.^{12,15}

Positive IPV Screens

In contrast to the intervention's lack of influence on overall screening rates, positive IPV screen rates were increased significantly from 5.22% to 7.79% after the intervention. The substantial increase in positive IPV screens at the project site may indicate that the IPV in-service advanced the nurses' knowledge, skill, competence, and confidence with routine screening. Like other nursing skills that can improve with training, the skill of performing an IPV screen may have been enhanced. When reviewing screening tools, Sprague et al¹⁷ found that the PVS identified IPV at a rate of 9.2%. Screening tools identify a higher number of victims compared with nurse/provider-identified IPV.¹⁶ Using the adapted PVS, IPV was identified at 9.4% during postintervention week 7 at the project site. When a

positive IPV screen is obtained, the patients benefit when nurses have information on the resources/referral services available.¹² There is a need to explore the patient perspective on nurse responses when IPV is identified.¹²

IPV Referrals/Resources

The IPV referrals/resources provided to patients doubled in the 4 weeks after the IPV nurse in-service. Although this increase in the referrals/resources was found not to be statistically significant owing to the overall low number of referrals, the increase in referrals is clinically relevant to patient care. IPV screening nurse training programs and support have the ability to increase the number of referrals.¹⁶ The patients who receive IPV referrals have the benefit of the expansion of resources and safety planning.¹² Further research is needed on nurse/provider perspectives on IPV screening, including the delivery of the patient resources/referrals.

Limitations

This practice improvement project had several limitations. Project generalizability and intervention sustainability were limited and unknown owing to the 9-week duration of data analyzed. Replication of the project intervention and an increase in the project duration could confirm the project findings. There was a possible reporting bias related to the emergency nurses' documentation on whether they completed the IPV screening, if the IPV screen was positive or negative, and if a referral was generated or resources were provided. Although nursing documentation is a legal account of the patient's visit, there was no additional validation of this data. The 3-item IPV screen only had 2 items with their validity and reliability tested. Other screening instruments may improve overall IPV screening, identification, and referrals. Another project area of limitation concerned the nurse IPV training/in-service. We did not measure the actual numbers attending or the change in their knowledge, skills, and attitudes.

Lessons Learned and Future Research

One of the lessons learned from this project is that the assessment of the nurses and their learning was limited. Instituting a pretest and posttest on the nurses' learning and/or a survey on the benefits of the IPV in-service would have been beneficial. The time/scheduling of the in-service/training and risk management concern regarding a substantial increase in the IPV cases identified were barriers to project implementation. The suggestions for future implementation on the basis of this practice improvement project are to increase the number of weeks analyzed and to assess nurse learning before and after the in-service. Content on red flags for IPV was not included in the educational intervention, and presents important information for future nurse education and training.

Implications for Emergency Nurses

The main implication for emergency nurses from this project is that the IPV screening intervention may contribute to IPV screening results, specifically, an increased number of patients identified with IPV. The patients' health and safety have the potential to be influenced positively through increased IPV identification and delivery of the referrals/resources. Nurses play an important role in IPV screening, identification, and the referrals/resources provided to victims. To optimize patient care and family safety, it is imperative to improve routine IPV screening in the ED setting. The IPV screening rates in our project remained less than 40%, indicating that clear criteria to tailor the intervention or continued interventions to increase the rates are needed. In addition, the ideal timing to conduct IPV screening within the ED setting has not yet been clarified.

Conclusion

This practice improvement project focused on increasing and improving routine IPV screening in the emergency department through a nursing in-service, computer prompt, and referral agreement. The project aim was to increase the identification of victims of IPV and the delivery of IPV referrals/resources to patients. The project results showed that an increased number of patients were identified with IPV, and the referrals/resources doubled after the nurse training. This project demonstrated that intervention may increase positive IPV screen results, thus identifying more

patients impacted by IPV. The main benefit of increased IPV identification is that it allows for a safety assessment and referrals/resources to be provided. The IPV intervention of a nursing in-service, computer prompt, and referral agreement may have assisted nurses to improve their skills and compliance for screening patients, especially during the holiday season.

Author Disclosures

Conflict of interest: none to report.

Week	Number of patients	Number of IPV screens	Rate of IPV screens (%)	Number of positive IPV screens	Rate of positive IPV screens (%)	Number of referrals/ resources
1	707	152	21.50	8	5.26	0
2	682	210	30.79	10	4.76	1
3	642	186	28.97	10	5.38	3
4	676	219	32.40	12	5.48	5
5*	619	240	38.77	10	4.17	5
6	691	162	23.44	11	6.79	3
7	634	170	26.81	16	9.41	5
8	771	191	24.77	14	7.33	8
9	708	196	27.68	15	7.65	2

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A Retrospective Records-Based Cohort of 1,082 Pediatric Forensic Cases Presenting to the Emergency Department: JEN

ABSTRACT (ENGLISH)

Introduction

This study was conducted to determine the pediatric forensic case type and demographic characteristics of patients presenting to the emergency department.

Methods

This study was a medical record-based cohort design, with a descriptive correlational analysis. Records were retrieved from the emergency department of a university hospital, in the Central Anatolia Region, for visits between 2013 and 2018. The study population comprised 1,082 cases that were evaluated at the emergency department, as forensic cases, in children aged 0 to 18 years. The data were assessed, using descriptive statistical analyses and chi-square test.

Results

A total of 24.1% of the pediatric cases were female, and 75.9% were male. The most frequent type of forensic cases, was from assault (55.2%), followed by 16.3% with sharp object injuries, 13.7% fall from height, 3.9% traffic accidents, 2.9% exposure to drugs and chemicals, and 8.0% from other causes. Most pediatric forensic cases, were adolescents (aged 13-18 years). There were significant differences by sex for assault (34.9% girls vs. 61.6% boys), fall from height (20.7% girls vs. 11.4% boys), exposure to drugs and chemicals (8.0% girls vs. 1.2% boys), and sexual abuse (6.1% girls vs. 1.0% boys) types of forensic cases.

Discussion

The study results have implications for nurses and health professionals to increase awareness of high-risk groups and diagnoses. This evidence can be used to inform standard protocols and education programs about pediatric forensic cases in emergency care.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature demonstrates that types of forensic cases vary based on age, sex, and environmental factors.
- This article contributes evidence that pediatric forensic cases were seen more often among boys and in the age group of 13 to 18 years. Assault and injury cases were the most frequently encountered types of forensic cases among both sexes.
- Key implications for emergency nursing practice found in this article are identification of high-risk ED presentations by sex and age groups to improve prevention, assessment, case finding, treatment, evidence collection, and referral interventions for emergency nursing in Turkey and globally.

Introduction

In the past decade, there has been an increase in ED visits related to such cases of childhood injury, poisoning, and pediatric maltreatment, globally.¹⁻⁵ In 2017, the World Health Organization estimated that up to 1 billion minors between the ages of 2 and 17 years had endured violence, either physical, emotional, or sexual.⁶ An estimated 2% to 10% of children visiting the emergency department are victims of either abuse or neglect.⁷ The number of ED admissions for child sexual abuse rose from 5,138 in 2010 to 8,818 in 2016, in the United States.⁸ Childhood injury is 1 of the leading causes of death globally, accounting for approximately 40% of all child deaths.^{9,10} According to the Centers for Disease Control and Prevention, in 2016 approximately 8,717 children younger than 15 years were

presented in an emergency care setting for injury-related complaints.¹¹ Suicide is the second-leading cause of death among individuals aged 10 to 19 years in the United States, accounting for >21% of deaths annually in this age group.¹² Most of these cases are forensic. Pediatric forensic cases are often presented first to the emergency department.^{13,14} Forensic cases include cases of traffic accidents, assaults, gunshot and blast injuries, all types of tool injuries, burns, electric shock, asphyxia, torture, maltreatment, sexual abuse, falls, poisoning, suicide attempts, and other injuries.^{15,16}

In the country of Turkey, the rate of pediatric forensic cases varies between 0.18 and 0.43.^{13,17,18} Forensic cases require the involvement of justice and health care systems, owing to the nature of injuries. Therefore, a high index of suspicion, as a potential forensic case, is maintained in Turkey, in clinical settings for children presented with injuries, including traumatic injuries and injuries sustained by falls.¹⁹ Regarding judicial notice practices in Turkey, the following are reported: cases of individuals brought to emergency departments by law enforcement officers as forensic cases, or those considered or suspected to be forensic cases by physicians on assessment. The prepared judicial report is submitted to law enforcement officers or military guard units. Then, the forensic case is reported to the hospital police, police station, or gendarmerie station at public hospitals.²⁰⁻²² In Turkey, forensic nursing is not defined in legal terms.²³ Therefore, the first evaluation of forensic cases is performed by emergency nurses who have not received specialized training on forensic cases.²⁴ There is currently little published evidence on the type of pediatric forensic cases in Turkey or the characteristics of these patients. There is a need to define the types and the contributing factors of pediatric forensic cases, for preparing protocols, standards, and training programs about approaches and precautions for forensic cases in Turkey.²⁰⁻²³

Pediatric forensic cases constitute a special group in terms of management and processes owing to differences in children's anatomical, physiological, and psychological makeup.^{17,25,26} It is important to characterize the types of pediatric forensic cases that present to the emergency department, by sex, age, and diagnosis.^{26,27} Describing the types of cases by age group may support developing targeted clinical approaches for the most prevalent diagnoses.^{17,26} Accordingly, this can help to identify the situations that pose a risk for child health and contribute to determining safe environmental strategies for children and to protecting and improving child health.¹³ Describing regional profiles and patterns of forensic incidents can be used to develop prevention strategies for future cases and guide priorities in professional training programs for clinicians and responders. Furthermore, evidence indicates that health care professionals require additional knowledge about evaluating forensic cases and skills on recognizing and managing such cases.^{21,28} Data on the past prevalence of forensic cases in emergency departments can be used to justify health care professional educational preparation, prevention strategies, and practice improvement.²⁹ Moreover, having knowledge of pediatric forensic cases that often present in emergency departments, and the children's demographic characteristics, will also contribute to increasing awareness among nurses working in emergency departments in countries where forensic nursing is not sufficiently developed.

The purpose of the present study was to describe pediatric forensic case types and demographic characteristics of patients presenting to the emergency department. The research questions were (1) What are the types of pediatric forensic cases admitted to the emergency department? and (2) Is there a relationship between the demographic characteristics of children and the types of cases?

Methods Design

This study was a medical records-based cohort design with a descriptive correlational analysis. Before beginning the study, institutional permission and approval from the Bozok University Clinical Research Ethics Committee were obtained (2017-KAEK-189_2017.08.24_08).

Setting

Records were retrieved from the emergency department of a university hospital in the Central Anatolia Region for visits between 2013 and 2018. This emergency department handles cases from the city center and 13 districts. As a general emergency department, only 1 part of the emergency department was caring for pediatric patients. The total number of pediatric patients admitted to this setting within 5 years was 5,204. The study sample comprised 1,082 pediatric forensic cases seen in the emergency department on the specified dates. In the post hoc power analysis conducted to determine the adequacy and effect size of the sample, the statistical power was calculated as 99.9%, followed by an effect size of 0.18 for the sex variable and 0.22 for the age variable. Because the goal was to have an effect size between 0.1 and 0.5, the sample size was sufficient for this study.³⁰

Participants

All pediatric forensic cases evaluated at the study site were included. Pediatric was defined as aged 0 to 18 years. Forensic case designation was made by the physician during the patient care encounter. Cases were designated as forensic if the patients were either (1) brought to the emergency department by law enforcement officers for evaluation or (2) reported by the emergency physician with the suspicion of being a forensic case during physical examination during the ED encounter. No cases meeting these definitions during the study period were excluded.

Variables

Demographic variables of patient sex and age were collected. Sex was categorized as boys and girls. Age was categorized as 0 to 3, 4 to 6, 7 to 12, or 13 to 18 years. ED admission date and diagnoses were obtained. From the diagnoses, the type of forensic case was categorized. On evaluation of patient files, the type of forensic case variable was categorized as follows, in accordance with diagnoses: (1) assaults by another person (eg, stranger and friend), (2) sharp object injuries (eg, gunshot injuries or injuries by sharp objects, such as a knife), (3) falls (fall from height; height >3 m or 5 m), (4) electric shock, (5) burns, (6) traffic accidents (motor vehicle accidents), (7) food poisoning, (8) carbon monoxide poisoning, (9) exposure to drugs and chemicals (any drug or corrosive substance), (10) sexual abuse, (11) foreign body aspiration, (12) drug use, (13) suicide, and (14) negligence (malnutrition).

Data Sources/Measurement

Data were collected retrospectively from the patient records in the hospital's electronic medical record system.

Analysis

The IBM SPSS Statistics, version 21.0 (Chicago, IL), were used for data analysis. Data were evaluated using descriptive statistics (number and percentage). Group differences were tested using chi-square or Fisher exact test. The distribution of pediatric forensic cases according to the types of forensic cases and demographic characteristics were shown, using a pie chart and bar graphs. A *P* value of **Results**

A total of 1,082 pediatric forensic cases of patients aged 0 to 18 years were evaluated at the study site from 2013 to 2018. No cases were excluded from the analysis. By sex, 24.1% of these cases were girls, and 75.9% were boys (Table 1). Most of the pediatric patients (70.8%) included in this study belonged to the 13- to 18-year age group.

The most frequent type of forensic case was assault (55.2%) followed by 16.3% with sharp object injuries, 13.7% fall from height, 3.9% traffic accidents, 2.9% exposure to drugs and chemicals, and 8.0% other causes (Table 2, Figure 1).

There were significant differences by sex for assault (34.9% girls vs. 61.6% boys), fall from height (20.7% girls vs. 11.4% boys), exposure to drugs and chemicals (8.0% girls vs. 1.2% boys), and sexual abuse (6.1% girls vs. 1.0% boys) types of forensic cases (Table 3).

There were no significant differences by sex for sharp object injuries, traffic accident, carbon monoxide poisoning, food poisoning, foreign body aspiration, drug abuse, and burn, suicide, electric shock, or negligence types of forensic cases. Stratified by sex, the frequency of forensic case type was highest for assault for both sexes (*n* = 91, 34.9% for girls vs. *n* = 506, 61.6% boys). The second and third most frequent types of cases were fall from height (*n* = 5, 20.7%) and sharp object injuries (*n* = 45, 17.3%) for girls and

sharp object injuries (n = 133, 16.1%) and fall (n = 94, 11.4%) for boys.

According to age group, significant differences were observed for forensic cases of assault ($\chi^2 = 286.76$, $P = 54.291$, $P = 204.79$, $P = 60.57$, $P = 16.96$, $P = 0.001$), exposure to drugs and chemicals ($\chi^2 = 14.96$, $P = 0.002$), and foreign body aspiration ($\chi^2 = 15.21$, $P = 0.002$) (Table 4, Figure 2). Stratified by age, the most frequent type of forensic case for the 0- to 3-year age group was fall from height (n = 51, 53.1%) whereas the second and third most frequent types of cases were sharp object injuries (n = 15, 15.7%) and assault and exposure to drugs and chemicals (n = 8, 8.3%). For the 4- to 6-year age group, the most common forensic case types were sharp object injuries (n = 22, 40.0%), fall from height (n = 16, 29.1%), and traffic accidents (n = 9, 16.4%), respectively. For the 7- to 12-year age group, the most common forensic case types were sharp object injuries (n = 49, 29.7%), falls from height (n = 42, 25.5%), and assault (n = 38, 23.0%), respectively. For the 13- to 18-year age group, the most frequent type of forensic case was assault (n = 547, 71.4%), and the second and third most frequent types of cases were sharp object injuries (n = 92, 12.1%) and falls from height (n = 39, 5.1%).

Discussion

Emergency departments have an important role in defining the forensic events that are among the most preventable health problems for children.²⁶ In this study, we examined the forensic cases of children presenting to the emergency department of a university between 2013 and 2018 to raise awareness about pediatric forensic cases by contributing to the limited literature on commonly seen forensic cases, identifying risk groups, and leading on the preventive and intervention efforts to be carried out in the future. We quantified the types of pediatric forensic cases presenting to the emergency department and observed the differences by age group and sex. In the present study, the common types of pediatric forensic cases presented at the emergency department were cases of assault, sharp object injuries, and falls from height. The aforementioned cases were followed by cases of traffic accident, exposure to drugs and chemicals, sexual abuse, carbon monoxide poisoning, and food poisoning. Various related studies conducted in Turkey have reported that the incidence of pediatric forensic cases of assault varies between 6.1% and 19% and fall from height varies between 5.3% and 16.9%.^{15,18} In comparison, in the United States approximately 19 children, aged 1 to 19 years, die every day from an unintentional injury. In 2016, for every unintentional injury death among those aged 0 to 19 years, there were approximately 33 hospitalizations and 1,053 ED visits.³¹

Adolescent Boys as High-Risk

In the present study, 2 of 3 pediatric forensic cases involved children aged 13 to 18 years. The reason for a higher number of pediatric forensic cases observed in this age group may be gendered cultural norms that increase exposure of adolescents to different types of environmental dangers. Adolescents are also prone to irresponsible behavior or poor anticipation of negative consequences.³² Most of the pediatric forensic cases in our studies were boys. This finding is similar to that of Kadioğlu²⁶ in which most pediatric forensic patients admitted to emergency departments were boys, most of whom were aged 15 to 17 years. Ökçesiz et al³² similarly found that forensic cases are more frequently seen in boys.

Pediatric Forensic Cases by Sex

We found that cases of assault, sharp object injuries, and falls from height were the most frequently encountered types of forensic cases in boys. Patients with fall-related injuries are usually younger than those with other types of trauma. Within this pediatric population, it has been reported that the prevalence of falls from height is age- and sex-related.³³ Similarly, Kadioğlu²⁶ found that most assault cases were seen in boys.

In the present study, sharp object injuries and traffic accidents were more frequent among boys than among girls. Kalkan et al³⁴ found that the injury rate among boys (58.1%) was greater than that among girls (41.9%). Chong et al³⁵ also determined that traffic accidents were observed more often among boys, similar to the finding of the present

study.

In this study, drug-related and chemical-related poisoning and sexual assault were observed significantly more often among girls than among boys. Bozlu and Kuyucu³⁶ have also reported that pediatric poisoning is common in girls and caused mainly by drugs. Sexual assault is a sociological problem affecting individuals belonging to all age groups. Our study finding that pediatric forensic cases of sexual abuse were more common among girls was consistent with the findings of similar studies.³⁷⁻³⁹ Sexual abuse cases may be underreported, especially when the victim is male.^{40,41}

In the present study, no forensic cases of suicide were observed among girls presenting to the emergency department. However, a low rate of suicide was observed among boys (0.5%). Molina and Farley⁴² found that pediatric suicides among boys were more common than among girls, with both having an average age of 15 years. In a related study, the rate of suicide attempts among individuals younger than 18 years in Turkey was found to be higher among girls than boys.⁴³ It is possible to assert that the lower rate of cases of assault, injuries, and suicide among girls is associated with the dominant gendered cultural norm in Turkey. In general, girls are closely supervised by their mothers, and suicide is considered forbidden or illicit. Therefore, closer adult supervision of boys in the society, displaying a less oppressive attitude while raising them, and demonstrating approval of positive behavior are recommended sex-specific prevention strategies in this context.⁴⁴

Pediatric Forensic Cases by Age

By age, fall from height was observed most frequently in the 0- to 3-year age group among pediatric forensic cases. According to the Centers for Disease Control and Prevention, in 2010, unintentional falls in children under 5 years led to 1,077,652 ED visits in the United States.¹¹ Turgut et al⁴⁵ revealed that falls from height were commonly observed in the 0- to 5-year age group. Similarly, Zahavi et al³³ found that cases of falls from height were the highest in boys aged 0 to 5 years.³³ The results of the present study are similar to those of previous studies. In our study, cases of burns were the highest in the 0- to 3-year age group, which may be associated with insufficient family security measures at home. One important childhood concern is foreign body aspiration. In our study, foreign body aspiration was seen mostly in the 0- to 3-year age group. In the literature, it has also been reported that most cases of foreign body aspiration involved children aged 46⁴⁷ These cases involving the 0- to 3-year individuals are thought to be caused by the structure of mobile infants or children, curiosity about their surroundings, their attempts to recognize objects by mouth, and their families' lack of knowledge about creating a safe environment.⁴⁸ In this study, it was determined that cases of child neglect were seen in the 0- to 3-year age group. In 2017, according to the Child Maltreatment Report of the Children's Bureau at the Health and Human Services Administration for Children and Families, 7 children per 1,000 were reported to be victims of neglect in the United States. Younger children are maltreated at higher rates than older children; the rate for children aged 0 to 3 years is 3 times the rate for children aged 16 to 17 years.⁵

In the present study, falls from height and traffic accidents were the most frequently encountered forensic cases in the 4- to 6-year and 7- to 12-year age groups ($P < .05$). In 2016, data from the United States revealed that motor vehicle crashes were the leading cause of death in children and adolescents aged 10 to 19 years, representing 20% of all deaths.⁵⁰ Yağmur et al⁵¹ found that the most common causes of trauma among children aged 51 Kafadar and Kafadar¹⁴ determined that fall from height was observed at an average age of 7 years, consistent with the results of the present study and some other studies.¹⁴

In this study, the most frequent pediatric forensic cases encountered in the 13- to 18-year age group were cases of assault, sharp object injuries, fall from height, poisoning, and sexual abuse. Ökçesiz et al³² determined that patients admitted to an emergency department and identified as forensic cases mostly belonged to the 11- to 17-year age

group, and most patients of this group were admitted because of assault, poisoning, and falls.³² Bozlu and Kuyucu³⁶ studied 1,734 pediatric patients who were taken to a pediatric emergency department because of poisoning. Cases of sexual abuse were mostly observed in the 13- to 18-year age group in this study. Silva and Barroso-Junior⁵² found that the average age of patients of sexual abuse was 8 years. Age is particularly important for judicial interviews.⁵³ Children's age affects their developmental level, language skills, and memory capacity. A child's age and developmental abilities influence his or her perception of an experience and the amount of information that he or she can store in long-term memory.²⁵ Therefore, reviewers should pay attention to building rapport with children according to their developmental age and the scope of information that is communicated to and sought from them.⁵⁴ In the present study, ED cases owing to drug use were only observed in the 13- to 18-year age group at a low rate (0.7%). According to the World Drug Use Reports, 208 million people worldwide used drugs in 2006, and the figure reached 247 million in 2014.⁵⁵ According to the 2013 data from the European Monitoring Centre for Drugs and Drug Addiction, the number of drug users (except those using hashish and ecstasy) is estimated to be 59,895 individuals. Reportedly, drug-use rates are lower in Turkey than in other countries; however, there has recently been a decrease in the age of drug users and an increase in drug-use rates in the young population.⁵⁶

Limitations

Because the findings of the study were obtained from forensic reports of the emergency department, the demographic characteristics of the children were limited to age and sex. There is a potential for misspecification of actual cases (eg, differences between reported abuse and actual abuse) because the study was conducted on the basis of reported cases only. As a single site retrospective review, no causation can be inferred, and the results of this study may not generalize to other settings.

Implications for Emergency Nurses

Among health care professionals, nurses are usually the first to encounter, communicate with, and examine forensic cases. In addition, most frequently the emergency nurse is the first person to touch the belongings of patients during examination and initial treatment.^{24,57} Emergency nursing activities in forensic case encounters include taking a detailed history; identifying, collecting, recording, and maintaining available evidence; maintaining a chain of custody of evidence handling; and intervening in crises.^{19,58,59} The results of our study can be used to identify high-risk ED presentations by sex and age groups to improve prevention, assessment, case finding, treatment, evidence collection, and referral interventions in emergency nursing in Turkey.

Emergency nurses are part of the multidisciplinary team that handles forensic cases.⁶⁰ Emergency nursing practice includes safeguarding evidentiary material through proper identification, collection, and preservation of forensic evidence.⁵⁹ Therefore, nurses working in the emergency department should also be sensitive about collecting forensic evidence when intervening in cases of common injuries and trauma. In the event of a forensic case, the patient's belongings and any material coming out of them should be carefully removed, protected properly, and delivered to the security officers, forensic physician, or relevant specialist. When prioritizing lifesaving management and resuscitation, the emergency nurses must also avoid the loss, contamination, or destruction of evidence.¹⁹ In Turkey, where there are a limited number of or no forensic nurses to handle forensic cases, emergency nurses must demonstrate competency in the collection and preservation of evidence in forensic cases.

The emergency nurse is responsible for recognizing the potential impact of violence and trauma on the patient's physical and psychological responses. Considering the cognitive and emotional development of pediatric patients while interviewing them is important for collecting accurate evidence. A multidimensional assessment may be required in the form of support from parents or other caregivers (eg, childcare providers, babysitters, or grandparents), especially for children who cannot communicate verbally.⁵⁴ Moreover, it is important to consider the

child's age-related developmental characteristics in these interviews, especially when handling forensic cases of sexual abuse.²⁵ From a forensic intervention perspective, despite some published protocols and guidelines, most countries, including Turkey, have not officially adopted guidelines for evidence management, namely, in acute sexual assault cases.⁶¹ The results of this study can serve as a resource for preparing guidelines regarding methods to be followed in handling forensic cases according to patient age.

Education guides and protocols that detail evidence collection procedures, patient rights, health care responsibilities, and the legal process are critical for emergency nurses to feel comfortable about caring for the pediatric population.⁵⁹ The results of our study can be used to establish standard protocols and education programs about approaching pediatric forensic cases for emergency nursing in Turkey. This study has shown that most of the forensic cases (serious injuries from choking, suffocation, and strangulation, falls from height, exposure to drugs and chemicals, etc) are preventable. Our results can be used to develop preventive and intervention studies including training programs related to cases that are frequently seen by sex and age. Because of the higher rates among younger children, the target age for many prevention efforts is the first 4 years of life, and prevention strategies addressing suffocation and choking hazards should include regulatory standards for baby and child product design and manufacturing, appropriate labelling practices, and public education.⁴⁸ Another prevention strategy particularly relevant to nurses is home visitation to prevent child maltreatment.⁶² Similarly, home-based studies including prevention training or evidence-based research (such as bicycle helmets, child passenger restraint devices, smoke alarms, and graduated licensing programs) can be carried out to protect against cases of burns and poisoning. Raising awareness about childhood injuries is important. Education programs have proven to be an effective means of helping parents and caregivers to reduce injuries, including fall-related injuries, among children through the creation of safer home environments.⁶³ Nurses can educate the family, children, teachers, and society about injury prevention that may occur in children in different age groups. In addition, emergency nurses can define priorities for and plan research on the causes, effects, costs, and prevention of injury among children.⁶⁴

Conclusions

In this study, we have described the types of forensic pediatric cases and demographic characteristics at 1 emergency department in Turkey between 2013 and 2018. Assaults, sharp object injuries, and fall from height were mostly observed among pediatric forensic cases admitted to the emergency department in this study. Cases of assault and fall from height were the most frequently encountered types of forensic cases in boys compared with girls. Exposure to drugs and chemicals and sexual abuse were the most frequently encountered types of forensic cases in girls compared with boys. Most pediatric forensic cases were adolescents. Our results have implications for nurses and health professionals in increasing awareness of high-risk groups and diagnoses. This information can be used to support interventions to create a safe environment for children, follow children and families in high-risk groups closely, take preventive measures, educate families and children, and establish standard protocols and education programs for handling emergency pediatric forensic cases. In addition, we recommend increasing emergency nursing training on forensic cases and forensic nursing to raise awareness about forensic nursing at the country level in Turkey and to support nurses in working in this field.

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Author Disclosures

Conflicts of interest: none to report.

Characteristics	n	%
Age, y		
0-3	96	8.9
4-6	55	5.1
7-12	165	15.2
13-18	766	70.8
Sex		
Girl	261	24.1
Boy	821	75.9

Type of forensic case	n	%
Assault	597	55.2
Sharp object injuries	178	16.3
Fall from height	148	13.7
Traffic accidents	42	3.9
Exposure to drugs and chemicals	31	2.9
Sexual abuse	24	2.2
Carbon monoxide poisoning	21	1.9
Food poisoning	15	1.4
Foreign body aspiration	6	0.6
Drug use	5	0.5

Burn	5	0.5
Suicide	4	0.4
Electric shock	3	0.3
Negligence (malnutrition)	3	0.3
Total	1082	100.0

Type of forensic case	Female (n = 261)		Male (n = 821)		χ^2	P
n	%	n	%			
506	61.6	57.36	<0.001	Assault	91	34.9
133	16.1	0.15	0.69	Sharp object injuries	45	17.3
94	11.4	14.32	<0.001	Fall from height	54	20.7
29	3.5	0.75	0.38	Traffic accident	13	5.0
10	1.2	30.76	<0.001	Exposure to drugs and chemicals	21	8.0
8	1.0	21.95	<0.001	Sexual abuse	16	6.1
				Carbon monoxide poisoning	8	3.1

13	1.6	1.57	0.21	Food poisoning	6	2.3
9	1.1	1.87	0.17	Foreign body aspiration	1	0.4
5	1.0	0.19*	1.00	Drug abuse	1	0.4
4	0.5	0.04*	0.82	Burn	2	0.8
3	0.4	0.61*	0.59	Suicide	0	0
4	0.5	2.21*	0.57	Electric shock	1	0.4
2	0.2	0.13*	0.56	Negligence (malnutrition)	2	0.7

Type of forensic case	0–3 y (n = 96)		4–6 y (n = 55)		7–12 y (n = 165)		13–18 y (n = 766)		χ^2	P
n	%	n	%	n	%	n	%	Assault	8	8.3
4	7.3	38	23.0	547	71.4	286	<0.001	Sharp object injuries	15	15.7
22	40.0	49	29.7	92	12.1	54	<0.001	Fall from height	51	53.1

16	29.1	42	25.5	39	5.1	204.79	<0.001	Traffic accident	2	2.1
9	16.4	19	11.5	12	1.6	60.57	<0.001	Burn	3	3.1
0	0	1	0.6	1	0.1	16.96	0.001	Electric shock	0	0
1	1.8	1	0.6	1	0.1	6.23	0.10	Exposure to drugs and chemicals	8	8.3
0	0	1	0.6	22	2.9	14.96	0.002	Carbon monoxide poisoning	4	4.2
1	1.8	6	3.6	10	1.3	4.52	0.08	Food poisoning	0	0
0	0	1	0.6	14	1.8	3.54	0.26	Sexual abuse	1	1.0
0	0	7	4.2	16	2.1	5.03	0.16	Suicide	0	0

1	1.8	0	0	3	0.4	4.11	0.25	Drug use	0	0
0	0	0	0	5	0.7	2.07	0.55	Foreign body aspiration	3	3.1
1	1.8	0	0	2	0.3	15.21	0.002	Negligence (malnutrition)	3	3.1

DETAILS

Subject: Medical records; Emergency medical care; Childrens health; Chi-Square Test; Food contamination & poisoning; Accidents; Law enforcement; Chemicals; Assaults; Training; Injuries; Hospitals; Nurses; Emergency services; Police; Sex crimes; Pediatrics; Patients; Educational programs; Prevention; Sexual assault; High risk; Health education; Girls; Age groups; Carbon monoxide poisoning; Medical personnel; Children & youth; Sexual abuse; Nursing; Departments; Suicides & suicide attempts; Teenagers; Demography

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Typology of Interpersonal Violence Model With Applications in Emergency Nursing: Forensics and Interpersonal Violence Special Issue: JEN

[ProQuest document link](#)

ABSTRACT (ENGLISH)

The purpose of this editorial is to introduce the World Health Organization Violence Prevention Alliance's Typology of Interpersonal Violence model as the organizing framework for our forensic and interpersonal violence-themed issue of the Journal of Emergency Nursing (JEN).^{1,2} My everyday work as an editor, administrator, and scientist is informed and motivated by my clinical and leadership experiences as a bedside nurse. [...]the responsibility for

inpatient forensic evidence collection was often unclear, and I wanted to ensure the forensic collection was not completely lost or forgotten in the complex, multisystem trauma management of this patient. Meaningful injury prevention requires emergency nurses to approach every injured patient, and patients from vulnerable groups, with a reasonable index of clinical suspicion of violence. Because the framework focuses on types of individual-to-individual violence, other types of forensic nursing and violence relevant to emergency nursing, such as terrorism,³ large gang, civil conflict,⁴ or suicide⁵⁻⁷ violence, are not included. The model can also be used by nurse researchers to organize existing scientific evidence to categorize gaps in evidence on person-to-person violence relevant to the emergency nursing specialty. Forensic Nursing in JEN Recent publications in JEN provide resources to improve emergency care relative to interpersonal violence by addressing forensic evidence collection,⁸⁻¹⁰ sexual assault,¹¹ intimate partner violence,¹²⁻¹⁴ child maltreatment,¹⁵ firearm injury,¹⁶⁻¹⁸ and workplace violence.¹⁹⁻²⁴ This current forensics-focused issue of JEN includes the Emergency Nurses Association (ENA) Position Statement on Violence and its Impact on the Emergency Nurse²⁵ and the ENA 50th anniversary celebration reprint providing historical context to SANE evidence collection outcomes from the 1990s.²⁶ Berishaj et al²⁷ present a conceptual model of the role of the forensic nurse hospitalist, with evidence-based support for continued specialization and differentiation of the forensic nurse examiner role specifically for the acute care setting.

FULL TEXT

The purpose of this editorial is to introduce the World Health Organization Violence Prevention Alliance's Typology of Interpersonal Violence model as the organizing framework for our forensic and interpersonal violence-themed issue of the *Journal of Emergency Nursing (JEN)*.^{1,2} My everyday work as an editor, administrator, and scientist is informed and motivated by my clinical and leadership experiences as a bedside nurse. The following memory from my emergency nursing practice continued to surface in my consciousness as our editorial team worked to bring this journal issue together: You should go home. If anyone is going to collect the rape kit on Jane Doe, it looks like it will be the coroner at this point.

The intensive care nurse made the aforementioned recommendation in an even, resolved tone. I hung up the phone slowly. After my intense 13-hour shift, it took some time to absorb what the patient's primary nurse was relaying. She had just received the patient from surgery and completed her initial assessment in the intensive care unit. If motivation and engagement to work in emergency nursing was a garden, this was one of those moments that planted the insidious weed-like seeds of burnout that, without tending, threatened to grow and stifle the joy and meaning in the work.

I did not get Jane Doe's consent to collect the forensic kit because she was never conscious under my care, and we had to prioritize other lifesaving multisystem trauma interventions. We had prioritized her airway, breathing, circulation, and immediate neurological status. We sent Jane Doe to surgery before we could address any other priorities. When my colleague inserted the urinary catheter to measure fluid output as we worked to prevent the patient's traumatic shock, we briefly noted genital trauma. Jane Doe was rapidly stabilized in the emergency department, survived surgery, and was admitted from surgery to the intensive care unit. I stayed long after my shift because the sexual assault nurse examiner (SANE) on call in our rural region would have arrived after substantial delays. Moreover, the responsibility for inpatient forensic evidence collection was often unclear, and I wanted to ensure the forensic collection was not completely lost or forgotten in the complex, multisystem trauma management of this patient. The opportunity for the health care system to match the quality of the forensic collection if she had been found dead, or had died in the first few hours of our care, was slipping away once again like a shadowy, serial criminal lurking in the very shadows of our procedures meant to aid, heal, save, and comfort. Unfortunately, Jane Doe's progression through the hospital system was far from unique. This issue of *JEN* highlights the next generation of forensic nursing and interpersonal violence problem solving and improvements, for which I am so grateful to the authors, reviewers, editorial and publishing teams. Rather than internalizing hopelessness and burnout, may we all be motivated by our Jane Does and one another to design and implement a much better system of practice for the future patients and emergency clinicians.

Typology of Violence Model

The Typology of Interpersonal Violence model provides a straightforward categorization of interpersonal relationship by type of violence (Figure 1).² Table 1 includes the definition of interpersonal violence. The types of violence are physical, sexual, psychological, and deprivation or neglect. The relationships are divided into family/partner and community. Family/partner relationships include child, partner, and elder. Community relationships are divided into acquaintance and stranger. This mental model of interpersonal violence is easily understood by emergency nurses and is a very basic part of nursing knowledge and competencies. The reminder and refresher here can be useful and important to translate into practice because ED care provides a unique and important opportunity to screen, assess, case find, treat, and refer patients who are experiencing or perpetrating interpersonal violence. For example, when a practicing nurse identifies that injuries may be from interpersonal violence, the nurse can select screening tools for child maltreatment, intimate partner violence, or elder abuse to thoroughly assess the patient's risk. Meaningful injury prevention requires emergency nurses to approach every injured patient, and patients from vulnerable groups, with a reasonable index of clinical suspicion of violence. Because the framework focuses on types of individual-to-individual violence, other types of forensic nursing and violence relevant to emergency nursing, such as terrorism,³ large gang, civil conflict,⁴ or suicide⁵⁻⁷ violence, are not included. The model can also be used by nurse researchers to organize existing scientific evidence to categorize gaps in evidence on person-to-person violence relevant to the emergency nursing specialty.

Forensic Nursing in *JEN*

Recent publications in *JEN* provide resources to improve emergency care relative to interpersonal violence by addressing forensic evidence collection,⁸⁻¹⁰ sexual assault,¹¹ intimate partner violence,¹²⁻¹⁴ child maltreatment,¹⁵ firearm injury,¹⁶⁻¹⁸ and workplace violence.¹⁹⁻²⁴ This current forensics-focused issue of *JEN* includes the Emergency Nurses Association (ENA) Position Statement on Violence and its Impact on the Emergency Nurse²⁵ and the ENA 50th anniversary celebration reprint providing historical context to SANE evidence collection outcomes from the 1990s.²⁶ Berishaj et al²⁷ present a conceptual model of the role of the forensic nurse hospitalist, with evidence-based support for continued specialization and differentiation of the forensic nurse examiner role specifically for the acute care setting. More work is needed to operationalize this refined idea of the forensic nurse hospitalist to a nationwide scale in practice. For example, continued innovation and evaluation of forensic nurse hospitalist program staffing, training, and reimbursement models are needed. Furthermore, patient drug overdose also presents forensic nursing concerns and increases the risk for interpersonal violence. Jones et al²⁸ provide detailed clinical information on the combination of drug overdose, loss of consciousness, and compartment syndrome (increased pressure in the muscle compartment) for nursing practice. Although specific forensic implications are not addressed in the clinically focused paper, there are several areas at the intersection of emergency care practices and forensics for our readers to consider. For example, in the midst of these clinically challenging and extremely time-sensitive patient care scenarios, are there missed opportunities to preserve evidence without interfering with lifesaving workflows? Astute and forensically trained emergency nurses might consider stocking and using a separate forensic sharps container in order to preserve syringes found on unconscious drug overdose patients for later forensic analysis. This simple action to preserve key evidence may enable law enforcement to later link one patient's overdose to others by identifying specific syringe contaminants, a particular batch of lethal street drugs, or a community dealer source. This issue of *JEN* provides readers with new evidence to address forensic and interpersonal violence. Table 2 provides a brief summary of the research and quality improvement studies in this issue. The research by Connor et al²⁹ translates to practice with a screening tool to aid in predicting the risk of patient aggression and violence, which has never been tested in the ED setting before. Reed and coauthors³⁰ program experienced a novel and unexpected benefit of an expanded Forensic Nurse Examiner program. Here, prosecutors demonstrated a clear and growing preference for forensic nurse testimony in a criminal court over the site's physician colleagues. Although this may be viewed as a proxy for the quality of forensic nurse examiner evidence collection and testimony, the cost-benefit and potential to scale to other sites require further evaluation and research. The evidence from Taplak et al³¹ provides an international needs assessment for continued injury prevention programs targeted at age and gender-specific risks, such as interpersonal assault prevention in adolescent boys, fall and traffic crash prevention in elementary-aged

school children, and sexual abuse prevention in girls. Comparing Turkey with other countries, the authors also discuss the need for specialized training for forensic nursing among those providing emergency care. Buterakos et al³² and Karnitschnig and Bowker³³ address the underscreening and underreporting of interpersonal violence for both patients and the emergency nursing workforce. In both instances, the interventions to improve screening and reporting met with limited success in changing the intended outcomes. These studies provide insights into insidious and intractable problems in interpersonal and workplace violence, demonstrating the profound need for continued innovation and modified interventions to improve screening and reporting. Ferri et al³⁴ studied violence against nurses in triage, adding uniquely to the published literature as few previous studies focused on the high-risk triage area alone. The authors found important differences in violence against female nurses, who experienced more physical aggression from patients and visitors, compared to male nurses who experienced only verbal aggression. For executives, managers, and health services researchers, it is noteworthy that 4 of these studies used administrative or medical records as data sources. An excellent resource to continue to elevate the scientific rigor of secondary dataset review projects and expand the national and global impact of emergency nursing scholarship can be found in the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) report entitled "A Synthesis of the Evidence on the Collection and Use of Administrative Data on Violence Against Women."³⁵ The report includes important considerations on measurement error, a minimum dataset recommendation, data management guidance, and key successful exemplars of the impact on far-reaching government policy and process changes.

Other Topics Related to the Care of Forensic Patients in *JEN*

The emergency nurse must remain vigilant for potential interpersonal violence in any trauma, overdose, or injury patient. This issue of *JEN* includes 2 papers addressing important emergency clinical care topics. The study by Geldenhuys and Downing³⁶ provides a systematic review of spinal immobilization, recommending more tailored and risk-based approaches to initiating spinal immobilization precautions. Addressing national practice recommendations in South Africa, the work serves as a global exemplar for national evidence-based practice recommendations. The authors reinforce that evidence reveals spinal immobilization for assault victims with penetrating trauma may cause more harm than good and that the practice should be implemented only for those with injury and risk factors where the evidence supports a therapeutic benefit. Further, Weinman³⁷ explains the history and evolution of the Rescue Task Force Concept for Active Shooter Incidents. In this Trauma Notebook column, we provide evidence-based updates on what the emergency nurse can expect from emergency medical services when receiving patients from an active shooter mass casualty incident.

This issue of *JEN* also includes resources to enhance clinical reasoning and leadership. Audley and Rosini³⁸ provide a case review of a massive acetaminophen overdose, and the Jones et al²⁸ case review stimulates critical thinking with a cardiovascular patient suffering from 2 simultaneous, acute life-threatening events, with the 1 cause masking the potential diagnostic ability to rapidly assess and detect the comorbid condition. Finally, Hollingsworth and Reynolds³⁹ provide readers with a high-level, leadership strategic planning Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis as a tool for a broad range of emergency nursing management and executive planning. Although the tool is not specific to forensic nursing problems, we do hope that the ENA position statement, exemplar forensic nurse examiner programs, and the SWOT tool can aid our emergency care leadership to plan and implement forensic programs and improvements with the resources provided here in *JEN*.

Actionable Injury Prevention

The collective evidence published in this issue of *JEN* demonstrates the alarming prevalence, intractably difficult detection, and life-threatening consequences of interpersonal violence. Although interpersonal, and more specifically intimate partner violence affect all ages and genders, it is a leading cause of mortality for pregnant and working-aged women.⁴⁰⁻⁴⁵ Twenty percent of female university and college students experience sexual assault at some point in their undergraduate years.⁴⁶ Emergency nurses have the opportunity to lead improvements not only in the individual care of the emergency patient, but to contribute expertise to multiple levels of community-based prevention and holistic victim recovery. ^{Figure 2} depicts the socioecological model with different levels of interpersonal

violence risk factors that emergency nurses can address in their intervention efforts: individual, relationship, community, and societal.⁴⁷ Examples of novel innovations to prevent injury and support recovery include a middle school, gender-based, violence prevention program⁴⁸ delivered by a sport coach and the creative use of photo diaries to understand victim experiences, assess for ongoing violence, and support the healing of victims.⁴⁹ Emergency nurses are in a key position not only to screen for the existence of intimate partner violence but also to further assess and intervene to prevent intimate partner femicide using tools such as Danger Assessment (www.dangerassessment.org).⁵⁰ We continue to welcome manuscripts on projects that tackle interpersonal violence through upstream injury prevention, improve the care of the forensic patient, reduce workplace violence for the emergency nurse, and support longitudinal victim healing and recovery in *JEN*.

Making a Difference

In this *JEN* editorial and issue, interpersonal violence and forensic topics range from societal influences to individual care in the emergency department. At the beginning of this editorial, I shared my memory of patient Jane Doe. Veiled behind layers of privacy, confidentiality, and Health Insurance Portability and Accountability Act of 1996 regulations, I never did learn her final outcome after I left the hospital that day. As emergency nurses, we rarely learn about the longitudinal impact of our episodic care, but we see the impact and find our closure in echoes and ripples in the news media about convictions, later ED visits from the patient for other unrelated health problems or general aggregate statistics. Personally, Chanel Miller’s biography entitled *Know My Name: A Memoir*⁵¹ was one of these stories of closure. The author had been sexually assaulted outside of a fraternity party. Her deeply moving victim statement gave voice to so many who are revictimized and minimized by legal system procedures. After the procedures and examination, her reflection on the therapeutic comfort the SANE nurses provided her was profound and brought meaning to my own work with patients who had been assaulted: “Which is why, thinking back on this memory with them, the discomfort and fear are secondary. The primary feeling is warmth.” In emergency care, we often work against overwhelming odds to prevent, treat, and mitigate the effects of interpersonal violence. Remembering that we are crucial to providing comfort and warmth in a deeply traumatizing time may be one small measure, but a profoundly moving and worthy mission in and of itself.

Definition of interpersonal violence by World Health Organization’s Violence Prevention Alliance
“Violence between individuals and is subdivided into family and intimate partner violence and community violence. The former category includes child maltreatment; intimate partner violence; and elder abuse, while the latter is broken down into acquaintance and stranger violence and includes youth violence; assault by strangers; violence related to property crimes; and violence in workplaces and other institutions.”

Purpose	Design	Data source	Intervention	Outcomes
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Test the predictive capacity of the DASA screening tool for measures of violence and aggression in the emergency department ²⁹	Observational retrospective record-based cohort Prognostic	1,548 emergency patients at 1,783 individual visits at one hospital site	N/A	Diagnostic accuracy of DASA = 79%
Evaluate expanded forensic nurse examiners program outcome of prosecutors' preference for fact testimony in criminal court ³⁰	Administrative record-based, quantitative retrospective program evaluation	562 subpoenas	Expanded forensic nurse examiner training and role to trauma patients	Subpoenas shifted from 100% physicians testifying before 2012 to 2.7% during 2012-2017 with corresponding rise in forensic nurse examiner testifying from 0% to 97.4%
Quantify types and demographics of ED pediatric forensic cases in Turkey ³¹	Medical record-based, retrospective cohort	2013-2018 visits aggregated, with 1,082 pediatric forensic emergency cases at 1 hospital site	N/A	Types of pediatric forensic cases varied by sex, age, and diagnosis, replicating results of studies in other countries and settings.
Improve the reporting of workplace violence; increase nurse perceptions on ability to prevent and respond to workplace assault ³²	Prospective, single-site, single-group quality improvement intervention evaluated with pre- and postparticipant survey	25 emergency nurses in Phase I; 34 in phase II at 1 hospital site	2-phase nurse education intervention	No pre- to postdifference in nurses reporting workplace violence (80%-84% did not report every time) 76% of the emergency nurses viewed violence as "part of their job" ≥90% experienced workplace violence in the last month

Increase intimate partner violence screening and the number of referrals/resources provided to patients ³³	Prospective, single site quality improvement intervention evaluated by medical record review	6,130 ED patients	(1) Nursing in-service education, (2) computer prompt, (3) referral agreement	No pre- to post-difference in overall weekly screening rates Of those screened, the rates of those who tested positive for intimate partner violence increased. Referrals to resources doubled
Better understand workplace violence experienced by triage nurses ³⁴	Mixed-methods	Twenty-seven triage emergency nurses	N/A	96% experienced violence in the last year. Physical aggression was only directed at female nurses. More workplace violence was experienced when working alone. Perpetrator of violence was most often lucid male relative of the patient.

DETAILS

Subject: Emergency medical care; Domestic violence; Workplace violence; Forensic science; Emergency services; Nursing; Differentiation; Collection; Acute services; Sex crimes; Specialization; Nurses; Terrorism; Leadership; Hospitalists; Editorials; Patients; Intimate partner violence; Forensic sciences; Trauma; Surgery; Conceptual models; Injury prevention; Sexual assault; Workplaces; Consciousness; Child abuse & neglect; Forensic evidence; Injuries; Intensive care; Scientific evidence; Inpatient care; Suicides & suicide attempts

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Prosecutor Preference for Forensic Nurse Testimony: Outcome of Expanding a Forensic Program: JEN

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ABSTRACT (ENGLISH)

Introduction

The objective was to evaluate the impact of using forensic nurse examiners for patients with trauma on prosecutors'

preference for testimony in criminal court.

Methods

A retrospective chart review of a database of 562 subpoenas received from January 2012 to December 2017 was conducted for patients with trauma seen in a level 1 trauma center with a comprehensive forensic nursing program.

Results

The prosecutors' preferences in 453 of the 562 subpoenas received by the Forensic Nurse Examiners program involving a patient with trauma were analyzed. The prosecutors preferred the use of the forensic nurse examiner alone in 441 of the 453 cases (97.4%), with a decrease (100% to 2.7%) in preference for physicians testifying in criminal court after the expansion of our forensic nursing program compared with previous years before the program expansion.

Discussion

The quality of the expanded Forensic Nurse Examiner program was validated by an increased prosecutor preference for forensic nurse examiner testimony in criminal court as the program matured over the years.

FULL TEXT

Contribution to Emergency Nursing Practice

- The current literature on the benefits of forensic examination for patients with trauma is sparse, which indicates an opportunity for current and future forensic nursing programs to study the impact of expanding their practice into trauma.
- This article contributes the main finding that the expansion of forensic nursing to patients with trauma can decrease dramatically the use of trauma attendings in court.
- Key implications for emergency nursing practice found in this article are that trauma centers should consider using a forensic nurse examiner for patients with trauma. The benefits are not limited to the care of the patient but extend to the staff and facility as well.

Introduction

Forensic nursing has become a valuable asset in the care of the patient after sexual assault over the last several decades. The benefits include better availability of qualified providers; their specialized training on evidence collection, chain of custody, and testifying; and improved cooperation of the patient with the police and the prosecutor's office.^{1,2} Forensic nursing, DNA technology, and an improved understanding of trauma-informed care have combined to improve significantly the care of the patient after sexual assault.³ Despite these advances in the care of the patient after sexual assault, there are many other patients who are assaulted or injured who do not receive the benefit of a medical-forensic examination. Assault fatalities undergo a coroner or medical examiner forensic assessment. However, most victims of assaults, which include gunshot wounds (GSWs) and stabbings, survive their injuries, and the current practice does not provide any forensic expertise in the course of their health care. Consequently, it is important that forensic nurses expand their services to other vulnerable patient populations, including patients who have been injured as a result of domestic violence, child abuse, elder abuse, strangulation, human trafficking, GSWs, and stabbings.⁴ The International Association of Forensic Nurses issued a policy paper in 2017 that encouraged legislation to ensure all adult and pediatric Level 1 trauma centers have prompt, 24 hours a day, 7 days a week access to Sexual Assault Nurse Examiners.⁵ This concept was broadened in 2018 by the Emergency Nurses Association, which has published a position statement encouraging the use of a forensically trained nurse in the process of evidence collection in the emergency care setting whenever possible.⁶ The care of these patients intersects with the legal system, often in a complicated and problem-prone manner. An understanding

of the potential pitfalls of consent, gathering and preserving evidence, chain of custody, reporting, documentation, and photographing injuries is important not just for the patients but also for the health care provider responsible for their care, the institution where the patients receive their care, and the safety of the community.

Out of this aforementioned need, in 2002 we embarked on a long-term plan to expand the services of our sexual assault nurse examiner program, which was established in 1996. Over the course of the next 6 years, our level 1 trauma center expanded its emergency department–based, in-house 24 hours a day, 7 days a week Forensic Nursing Program to include domestic violence, child abuse, elder abuse, and patients with trauma such as GSWs, stabbings, and felony-level aggravated assault, completing this process in 2006. Forensic nurse examiners (FNEs) were trained incrementally in all these areas. Recognizing the high standard of documentation required by forensic experts for GSW evaluation, each FNE received 8 hours of expert training in this area alone. Our team members noticed an increase in the prosecutor using an FNE to testify in trauma cases. Subpoenas for physicians became less common. Within a short time, it became clear to law enforcement officials and the prosecutor’s office that FNEs were extremely valuable not just in the collection of evidence and their photographic documentation but also in their ability to provide testimony in court. In 2012 we started a database of all subpoenas received, with court outcomes and prosecutors’ preference for testifying when available.

Available Knowledge

We identified a substantial gap in the literature as we found no published articles that addressed the use of an FNE testifying for trauma cases in general or for GSWs. A literature search of PubMed was performed using the search terms “forensic,” “testifying,” “gunshot wound,” and “trauma,” yielding 273 articles, 2 of which addressed using an FNE in sexual assault cases^{7,8} and 1 in intimate partner violence.⁹ Secondary searches revealed policy statements on forensic nursing^{5,6} and physician evaluation of GSWs.¹⁰⁻¹²

Purpose

To address the gap we identified in the literature, the objective of this project was to evaluate the impact of our expanded FNE program, using FNEs for patients with trauma, on prosecutors’ preference for testimony in criminal court.

Methods Study Design

A retrospective chart review of our database of subpoenas received from January 2012 to December 2017 and the corresponding patients’ charts was conducted, including the number of years before the program expansion as historical control. The study protocol received institutional review board approval at our institution on September 19, 2018. A stipulation was made that we were not allowed to contact (retrospectively) the prosecutor’s office for the purposes of our study.

Setting

The setting for the program was a level 1 trauma center with 100,000 ED visits per year, with in-house FNEs available 24 hours a day, 7 days a week in the emergency department.

Data Sources

From January 2012 to December 2017, a team member recorded each subpoena received regarding the patients seen by an FNE. A list of subpoenas was kept in a separate “trauma subpoena folder” for the patients evaluated in our emergency department who were also seen by the trauma team and for all victims of GSWs and stabbing (even if only seen by the ED provider and not by the trauma attending physician). The data entered at the time of receiving the subpoena included the date of the subpoena, name of the prosecutor, case number for the legal proceedings, name of the accused, name of the patient seen in the emergency department, date of service, type of trauma, name of the FNE, name of the physician caring for the patient, whether or not the physician testified at trial, whether the

FNE testified at trial, who the prosecutor preferred to use in the event the case went to trial, and the legal outcome of the case. The prosecutor preference for upcoming trials, whether an FNE or a physician or both, testified at completed trials, and the court outcomes for completed cases were obtained by phone by the FNE coordinator with the prosecutor's office on a monthly basis.

Case Definition Inclusion and Exclusion Criteria

The trauma subpoena folder had 617 total entries and was screened for appropriateness for our study. Patients under the age of 18 years, erroneous entries, and entries with inadequate data were excluded. Entries with the same trial date and patient but with multiple defendants were combined into a single entry. Subpoenas for sexual assaults were not included in the absence of significant additional trauma. If a trial was canceled and rescheduled, and a new subpoena was initiated, it was re-entered with a new date.

Data Processing

A chart review was completed by 2 of the authors using written guidelines on the remaining 562 cases for which the FNE received a subpoena from January 2012 to December 2017 to complete any missing data in the database. Subpoenas with different defendants but with the same trial date and the same victim were counted as a single data point during the chart review process. The data were uploaded into REDCap¹³ (Vanderbilt University, Nashville, TN) using our institutional access. All charts were reviewed for accuracy by the lead author, and any errors were corrected. Deidentified data were submitted for a statistical analysis.

Data Analysis

A descriptive analysis was completed to calculate the number of subpoenas for the FNE versus physician for testifying in criminal court. Using Fisher's Exact Test of Independence, we tested correlations between prosecutor's preference for testifying and prosecutor's name, name of the FNE, type of trauma, and by year. Whether the FNE, physician or both testified was tested for correlation with court outcome using Fisher's Exact Test of Independence.

FNE Program Expansion

Table 1 presents a logic model of the FNE program expansion. Starting April 1, 2006, the last phase of our FNE expansion was completed by adding trauma services, with the FNE responding to trauma activations regarding assaults, plus all GSWs and stabbings. This required an FNE to be in-house, 24 hours a day, 7 days a week, in a dedicated forensic position. We prepared a "go-bag" that the FNE could obtain rapidly and take to the patient's room, and be present on arrival, photographing and preserving evidence from the second they arrive. The FNEs were trained to be careful always to not interfere with the medical care of the patient.

Implementing this expansion required flexibility, hard work, and a commitment to excellence. If the FNE was in the middle of a sexual assault examination, they could not interrupt that examination to go to a trauma case.

Fortunately, other FNEs in the department often were available to assist in that case, or the FNE on duty would attend to the trauma case after their sexual assault case care was completed. Other members of the trauma team soon realized the value of having the FNE take responsibility for preserving evidence, chain of custody, interfacing with law enforcement officials, and reporting issues. They learned to work together and more efficiently over time.

FNE Program Continuous Quality Improvement

As part of our continuous quality improvement and professional development, we completed case reviews and had vigorous debate among ourselves on issues such as exit versus entry sites in the case of GSWs, range of fire and direction of fire, as well as the mechanism of injury in blunt trauma cases. We practiced continually to improve our photography skills. FNE team members led trainings on GSWs for the ED staff and the trauma team, strengthening our relationship and demonstrating our expertise. When the FNEs started to receive subpoenas several months later, they reviewed the medical charts and rehearsed their answers to the expected questions. We developed a list

of anticipated questions and flash cards to help in court preparation. Within a short time, the attorney general's office found the FNEs to be reliable and valuable witnesses. Soon thereafter we found that the trauma attendings and other providers were no longer being used in court. In fact, often they were never even subpoenaed. Currently, the trauma attendings are among our biggest FNE program supporters at our site.

Results

A total of 617 entries were included in the database (^{Figure}). For the 562 subpoenas remaining after the inclusion and exclusion criteria were applied, the cases were broken down by the type of trauma (^{Table 2}), the year the subpoena was received, and the prosecutor's preference for testifying (^{Table 3}). The distribution of cases shows that 44.8% were GSWs, followed by aggravated assault (21.0%) and stab and/or knife wounds (20.6%). Overall, the FNE alone was preferred to testify in 441 of the 453 cases (97.4%) when a preference was recorded and the physician alone in 8 cases (1.8%). Both were preferred for testifying in 4 cases (0.9%). The prosecutor's preference for an FNE alone was consistently high from year to year. In most of the cases when a physician alone was preferred, an FNE was not available for trial.

A supervising physician was listed as the trauma attending in 86.8% of cases, the ED physician in 9.8%, and was not listed in 3.7% of cases. Physicians received a subpoena in only 74 of 468 (15.8%) cases when this information was listed. There was no correlation between the prosecutor's preference for testifying and the prosecutor involved, FNE involved, physician involved, or the type of trauma. In the cases where it was known who testified, the physician testified 6 times (1.1% of 543) and the FNE testified 55 times (9.9% of 557). Of the 290 cases that were prosecuted, and where the court outcome was known, 281 (96.9%) defendants either pled guilty or were found guilty at trial. Only in 5 cases were the defendants found not guilty at trial, and 4 cases were declared a mistrial. The trial outcome (when known) was guilty in 36 of 44 cases (81.8%) when the FNE alone testified, in 1 of 1 case when the physician alone testified, and in 1 of 1 case when both testified. There was no correlation between the person testifying and the court outcome. The court outcomes are listed in ^{Table 4}.

Discussion

This evaluation was a retrospective database review from an expanded FNE program with a descriptive analysis of the frequency for using an FNE alone to testify as the primary outcome. The results are compelling in support of the quality of FNEs to provide testimony in criminal court for trauma cases. To the best of our knowledge, this evaluation is a unique contribution to the published literature too, as we found no studies addressing FNEs testifying for general trauma or for patients with GSWs. Although there is no official record regarding who would be used to testify in trial before the expansion of our FNE program, historically the physician of record from the emergency department or the trauma attending was subpoenaed to testify 100% of the time to enter the medical record into evidence. For emergency departments considering an expansion of their forensic programs, the program leaders may consider collecting baseline data regarding who is getting subpoenaed for these cases.

This evaluation took place in a single site program with a well-established, in-house, 24 hours a day, 7 days a week forensic program. This program is substantially different from an on-call staffing model. Although our FNEs were already in-house before this final stage of expansion, they were often in float assignments and left that assignment when a forensic consult arrived. Our volume, however, almost doubled when we expanded to trauma cases, justifying a dedicated position.

Before the initiation of our program, it was routine for the prosecutor's office to subpoena the attending physician, as well as every other identifiable provider on the medical record, when a case went to trial. The use of the trauma attending as the primary witness regarding the medical care and the consequences or potential consequences of the injuries was routine. Communication obstacles and delays in court dates were common and frustrating. Many

physicians have limited availability to appear in court on short notice. In addition, although well trained in the medical care of the patient with trauma, physicians generally do not have forensic training for those same types of patients.¹⁴ Physician documentation at a level 1 trauma center correctly documented the exit and entry sites, number of wounds, and location of wounds in only 64% of single GSWs, and just 7% when more than 2 injuries occurred.¹⁰ This is consistent with other studies.^{11,12} Additional frustrations arise out of the unintentional destruction of evidence, lack of chain of custody, and inadequate description of the physical characteristics of most wounds for forensic purposes. And while traumatic fatalities receive an assessment by a medical examiner, trauma survivors rarely receive a formal forensic assessment outside of sexual assault. It is hard to imagine prosecuting a GSW homicide without a forensic expert testifying in court, yet we tolerate this for our patients that survive. The difference is arbitrary and unacceptable, and hardly conforms to our goal to provide trauma informed care.⁶

Training and court preparation were key to our successful FNE program expansion into trauma. We expanded to our current level over a period of 6 years, learning and troubleshooting our protocols over time in a process of continuous improvement. Expanding to a comprehensive program all at once may not have the same success, at least at first. Trauma physicians have been cited previously for insufficient forensic documentation regarding GSWs.¹⁰⁻¹² Without specific training on the proper assessment and documentation of the physical characteristics of GSWs, FNEs too risk falling short of optimal outcomes. Our training for GSWs was conducted for 8 hours on-site by a well-respected forensic expert, followed by periodic trainings led by team members. A concerted effort was made to prepare for each case in which the FNE was subpoenaed, including court preparation by the FNE leadership, individual preparation using flash cards and a detailed chart review, and finally meeting with the prosecutor. If the case was rescheduled, the FNE prepared again in the same manner. In the absence of similar training and preparation, the outcomes may be quite different.

Future research and evaluation are needed to ascertain the objective benefits of FNE programs for patients' outcomes. The FNE role allows the trauma team members to delegate the forensic care and maintain their focus and efforts on the medical care because they work in tandem. The argument in favor of FNE programs can be illustrated one tragic case at a time. A single case of lost evidence, failure to maintain chain of custody, or misidentification of the direction of fire or range of fire can be the difference between guilt and innocence, between justice and a lack of closure, and is an avoidable error that any trauma center will experience at some point. The ability of the other members of the trauma team to stay focused on the health care component of trauma care is a benefit on its own. The priority of any trauma team should always be the medical and nursing care.

Obtaining court outcomes was quite challenging, and future studies may consider limiting their data to their primary jurisdiction. Although most of our patients are from 1 county, our FNEs care for patients from 4 states and at least 10 counties, with more than 100 separate prosecutors recorded in our database. Nevertheless, we were still able to obtain court outcomes in 93.6% of cases and prosecutor preference in 80.1% of cases. A study limited to 1 prosecutor's office would likely have a higher percentage of prosecutor preference and court outcomes obtained. Furthermore, 37% of our cases were postponed and were treated as separate cases if rescheduled in our evaluation. This methodology is appropriate in our view, considering our approach in preparing for each case. We acknowledge that a trauma surgeon's expert testimony might be preferred regarding the anatomy of the injuries, details of any surgical intervention, and the potential consequences of both injury and surgery. However, our experience was that the FNE's availability, preparation, and forensic training were more important to the prosecutors. Prosecutors acknowledge the value of the sexual assault nurse examiner in the literature, including superior documentation, thoroughness of the physical examination, identification of injuries, quality of the relationships with patients, professionalism, skill in trial preparation and testifying, and credibility with jurors.⁷ In our

cases, the prosecutor had complete authority regarding which expert witnesses would be used at trial. Future studies should examine the prosecutors' rationale for choosing who will testify at trial in trauma cases.

Limitations

Our results cannot be generalized to other sites or to emergency departments without a 24 hours a day, 7 days a week FNE program. Prospective data collection with more complete data and a control group would have allowed for a more robust analysis using statistical modeling.

Implications for Emergency Nurses

We provide an exemplar expanded FNE program model for consideration in other emergency departments. We found that the quality of the FNE program was validated by a strong prosecutor preference for FNE testimony in criminal court as our program matured over the years. Moreover, we provide a model of continuous quality improvement for FNE programs that can be replicated by forensic nurses in other emergency departments, including court testimony preparation. Largely unaddressed in the published literature, difficult to measure, but important nevertheless, is the impact of a forensic team on the emergency nurses and doctors caring for the patient clinically. Our staff depends on our FNEs to handle the evidence preservation, chain of custody, reporting, detailed documentation, and any future testifying. FNE programs can provide for a more confident and comprehensive yet relaxed approach to the care of our patients with trauma. Our findings provide an innovative program and corroborating support to implement the International Association of Forensic Nurses recommendations on 24 hours a day, 7 days per week availability of SANEs in Level 1 and 2 trauma centers and Emergency Nurses Association's recommendations in its position statement on "Forensic evidence collection in the emergency care setting."^{5,6}

Conclusions

Forensic nurses are a valuable asset to the assaulted patient, the facility, and to the community at large. They should be incorporated into the care of a variety of traumatized patients and, with proper training and preparation, can be the preferred choice of prosecutors in testifying at criminal trial. Future research should address the FNE's accuracy in assessing GSWs based on established criteria, a prosecutor's rationale for selecting who will testify at trial, and a cost benefit analysis of an expanded FNE program. Emergency departments should assess the burden that testifying in trauma cases imposes on their staff and their current competency in addressing the forensic component of the assaulted patient's care as well as begin the process of improving these areas. The link to the logic model for expansion of an FNE program will assist in this endeavor (^{Table 1}).

Author Disclosures

Conflicts of interest: none to report.

Inputs/Resources	Activities/Interventions	Measures	Outcomes	Impact
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<p>Support: Nursing administration, FNE coordinator, FNE medical director, and FNE team members. Partners: Trauma team, law enforcement officials, prosecutor's office, office of the public defender, HIPAA compliance officer, medical examiner/coroner, ED medical staff, and educators/trainers. Equipment: Reference books, cameras, evidence collection supplies, boxes and bags, ABFO scales, go-bags, and storage lockers with locks. Logbooks for clinical cases, evidence lockers, court cases, and quality improvement. Funding sources: ED/Trauma Department budget, victims of crimes, grants, and department of justice.</p>	<p>Assess community and ED needs. Investigate billing opportunities. Report to hospital administration. Collaborate with emergency nurses, ED physicians, PAs, and NPs. Collaborate with law enforcement officials, prosecutor's office, and office of the public defender. Develop clinical practice guidelines: trauma forensic examination, unconscious victim, release of evidence, chain of custody, and prioritization guidelines. Develop documentation tools: consent for examination and photography, history of assault, body diagrams with legend, and list of photographs taken. Memorandum of understanding with law enforcement officials, prosecutor's office, and office of the public defender. Apply for grants. Education and training of FNE staff with regard to HIPAA, GSWs, stab wounds, self-inflicted wounds, accidental wounds, intentional wounds, and strangulation. Roles and</p>	<p>Volume of trauma forensic patients: gunshot wounds, stabbings, aggravated physical assaults, pedestrians struck, strangulation, domestic violence, elder abuse, child abuse. FNE documentation of physical characteristics of wounds and chain of custody. Reporting number of subpoenas received, number of times testifying, court outcomes, number of FNEs trained, retention rate, time required per examination, staffing requirements, cost of equipment, and initial replacement.</p>	<p>Improved evidence collection. Improved documentation of history, physical characteristics of wounds, and chain of custody. Higher use of FNEs in court. Reduced chain of custody errors. Reduced FNE turnover. Reduced transfer of patients to obtain forensic evaluations.</p>	<p>Expert forensic testimony available to all patients. Higher likelihood that forensic evidence will be properly collected and preserved, properly passed on to law enforcement officials, and usable in court. Enhanced patient satisfaction. Improved relations with law enforcement officials, prosecutor's office, and office of the public defender.</p>
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	responsibilities: testifying, continuing education, chart review, develop quality improvement program, and court preparation.			
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Type of trauma	N	%
Aggravated assault	118	21.0
Domestic violence	15	2.7
Elder abuse	3	0.5
GSW	252	44.8
Pedestrian struck	21	3.7
Sexual assault	2	0.4
Stab/knife wound	116	20.6
Strangulation	19	3.4
Not listed	16	2.8
Total	562	99.9

Year	Number of forensic cases	Number of trauma cases with FNE	Number of subpoenas received	Prosecutor's preference recorded	FNE alone preferred (%)	Physician alone preferred (%)	Both preferred (%)
2012	2,029	791	92	64	63 (98.4)	0	1 (1.6)
2013	1,963	797	92	56	55 (98.2)	0	1 (1.8)

2014	2,020	846	73	60	55 (88.3)	5 (11.7)	0
2015	2,061	852	94	82	80 (97.6)	1 (1.2)	1 (1.2)
2016	1,972	815	112	99	96 (97.0)	2 (2.0)	1 (1.0)
2017	1,920	749	99	92	92 (100)	0	0
Total	11,965	4,850	562	453	441/453 (97.4)	8 (1.8)	4 (0.9)

Verdict	N (%)	FNE testified	Physician testified	Both testified
Guilty (trial)	39 (6.9)	35	0	1
Guilty (plea)	242 (43.1)	4*	0	0
Not guilty (trial)	5 (0.9)	1	1	0
Charges dropped	26 (4.6)	N.A.	N.A.	N.A.
Postponed	210 (37.4)	N.A.	N.A.	N.A.
Mistrial	4 (0.7)	4	0	0
Unknown	36 (6.4)	8	2	2
Total	562 (100)	52	3	3

DETAILS

Subject: Patients; Emergency medical care; Evidence; Testimony; Databases; Domestic violence; Adult abuse & neglect; Trauma; Documentation; Assaults; Health care; Trauma centers; Stabbings; Trials; Chart reviews; Nursing; Child abuse & neglect; Sex crimes; Nurses; Examiners; Courts; Public prosecutors

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Caring for victims of violence: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 267.
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In the emergency department we care for patients across the entire lifespan, including any element that faces us: from the baby we just delivered, the pediatric patient with reactive airway disease, the victim of violence, the behavioral health patient, or the victim of sexual assault, to the patient taking his/her last breath. The National Center for Health Statistics estimates that approximately 37.2 million people visit an emergency care setting for injury-related complaints annually.¹ The National Hospital Ambulatory Medical Care Survey showed that in 2016 there were 1.6 million visits to emergency departments in the United States for assault alone.² It is reported that over 1 million lives are lost annually as a result of self-inflicted, interpersonal, or collective violence.¹ The National Coalition Against Domestic Violence estimates that more than 10 million people become victims of abuse annually in the United States, which means that on average 20 people experience intimate partner abuse every minute. The "Trafficking in Persons Report" released in June, 2019, by the U.S. Department of State, reported that 24.9 million people are victims of human trafficking.⁴ It is staggering that approximately two-thirds of these victims will interface with the health care system at some point without being identified.⁵ Caring for victims of various types of violence is not something for which we are all consistently trained.

The ED nurse Manager's guide to utilizing SWOT analysis for performance improvement: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 368-372. doi:<https://doi.org/10.1016/j.jen.2020.02.006>

The SWOT analysis tool was originally created in the 1960s as a business strategy brainstorming tool to assess and analyze similarities and differences between an organization and its competition.³ Advantages to completing and utilizing SWOT analysis include, but are not limited to, providing awareness of potential and critical problems affecting an organization, focusing on both the positive and negative facets of the internal (intrinsic) and external (extrinsic) organizational environment, aiding in the recognition of opportunities for the organization, and its simplistic use.⁴⁻⁶ The SWOT tool includes 4 main assessment elements: strengths, weaknesses, opportunities, and threats (Table 1). Strengths and opportunities are facilitators that help a department or organization achieve goals, whereas weaknesses and threats are barriers to achieving goals.³ Each element is then assessed by answering a series of questions through brainstorming that focuses on both intrinsic and extrinsic factors.⁷ Completing SWOT analysis is typically part of an organization's overall strategic management process.⁴ Applying the SWOT Analysis The SWOT analysis is not a new management tool. Opportunities (facilitators) and threats (barriers) are external to the organization, and although an organization can benefit from opportunities and guard against threats, they cannot be changed.⁴ The purpose of this article is to guide the ED nurse manager in the application of this useful method through a step-by-step approach.² Step 1- Determine the Need In line with strategic planning, SWOT analysis should be completed on an annual basis and as needed in relation to the organization's mission, vision, and goals.⁹ Within the health care realm and specifically in emergency departments, SWOT analysis should be implemented when financial constraints occur, when patient outcomes are undesirable, when patient satisfaction has decreased, when safety issues arise, and/or when patients choose other health care organizations to obtain care. Step 2- Gather the Team In performing and answering the SWOT analysis, all relevant stakeholders should be included.¹⁰ Stakeholders should include staff, nurses, and members of the interdisciplinary team, including physicians, nurse practitioners, physicians' assistants, and therapists, if applicable. ...]during the adjourning stage, the majority of the goals have been obtained and documented with action plans in place, if needed.

Forensics and emergency nursing: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 268-274.
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...I will outline strategies that enabled me to empower patients, families, the community, nurses, law enforcement, legal agencies, emergency services, and legislature. Emergency Department Nurses Association Then, ENA Now I have been a member of the Emergency Nurses Association (ENA) since 1979, the early years of the ENA, shortly after Judith Kelleher and Anita Dorr founded the Emergency Department Nurses Association (EDNA) in 1970.

Forensic science considerations are especially important during care of patients in the emergency department who are persons under law enforcement custody or rape survivors, or are involved in interpersonal violence, intimate partner violence, human trafficking, near strangulations, evidence collection, injury description, medicolegal documentation, death investigations, handling of biological evidence, mass disasters, and community crises.¹ I can share ² examples of women who presented to the emergency department triage with the chief complaint of dizziness. Every emergency nurse must recognize the signs and symptoms of violence, and take action to stop the cycle of violence.¹⁻⁶ Forensic nurses can be defined as health care professionals who perform in partnership with law enforcement during emergency care for individuals who are in the custody of the law or who may be involved in situations where nurses are mandated reporters.¹ Federal and state laws regulate mandated reporters. When you care for patients who are still alive and whose care crosses medicine and the legal system, you are involved in living forensics.⁸ Living forensics is the forensic science associated with the legal cases involving living victims.⁸ Emergency nurses interface with patients associated with living forensics during care of patients living with addictions, alcohol misuse, drug misuse, behavioral health conditions, intimate partner violence, interpersonal violence, child abuse, incest, sexual abuse, sexual assaults, rape, human trafficking, elder abuse, disabled persons' abuse, neglect, drug tampering, poisoning, medical malpractice, nonfatal assaults, and motor vehicle crashes with and without pedestrian involvement.⁸ Any abuse while a person is in the custody of law enforcement and correctional facilities is considered a living forensics situation.⁸ How Should Emergency Nurses Provide Forensic Care?

Increased intravenous N-acetylcysteine dosing following massive acetaminophen ingestion: A case report: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 359-363. doi:<https://doi.org/10.1016/j.jen.2020.02.015>

In the emergency department, the patient was intubated owing to altered mental status and lack of a gag reflex. Acetaminophen APAP is a frequently used over-the-counter analgesic and one of the most common causes of intentional and unintentional overdose leading to acute liver failure in the Western world.¹ The daily recommended dose of APAP is ≤ 4 g in a 24-hour period, and toxicity can develop if ≥ 7.5 g is acutely ingested. NAC acts to decrease the amount of the toxic metabolite formed and aids in restoring hepatic GSH by serving as a GSH precursor and substrate.^{1,2} If APAP toxicity is suspected, a blood APAP level should be checked and liver function tests (LFT) should be carried out.^{2,3} The decision to treat patients with NAC is determined by the population-based Rumack-Matthew nomogram. A massive ingestion has been defined as a single APAP intake > 40 g or a blood APAP level of 300 mg/L at 4 hours after ingestion or 2 times the concentration of the treatment line on the Rumack-Matthew nomogram for a subsequent time point.^{3,6} The standard weight-based NAC treatment regimen does not take into account the dose of APAP ingested or higher initial blood concentrations; therefore, this regimen may be insufficient for massive ingestions.⁷ Extending the duration of treatment and using higher doses of NAC may be necessary in cases of massive ingestion. The administration of an additional NAC bolus or extending the 16-hour infusion may also be appropriate with a persistently elevated blood APAP level.⁹ When increasing the dose or duration of IV NAC, clinicians must use caution to prevent dosing, compounding, or administration errors and avoid massive doses of IV NAC that have been associated with adverse drug reactions.^{10,11} The American College of Medical Toxicology recommended discontinuing NAC treatment when the APAP concentration is undetectable, and there are improving LFT and prognostic markers.

Efficacy of SANE evidence collection: A minnesota study: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 283-285. doi:<https://doi.org/10.1016/j.jen.2020.01.008>

To date the evidence supporting the utility of this model, although persuasive, is primarily anecdotal and testimonial. Evidence of SANE Efficacy Currently Available We know from the existing literature that the use of a SANE speeds up the evidentiary examination process by shortening the time a victim may have to wait for a physician to be available to complete the examination in a busy emergency department, and by shortening the time to complete the examination, because it is being done by an experienced nurse examiner.^{2,3} Not only are SANEs doing the examinations in less time, but we expect that the quality is improved because a trained, experienced SANE knows what evidence to collect and how to meet the crisis intervention needs of the survivor.⁴ The literature also indicates that prosecutors are obtaining increased numbers of guilty pleas from offenders. ...]she is a more willing witness

than the physician who happened to have been on duty when the rape survivor was seen, but who has very little experience or expertise in this specialized area of practice.^{2,6} Another indication of the credibility of the SANE in the courtroom is the fact that her testimony alone is sufficient. The completed checklists were sent to SARS by the BCA for tabulation. Results Of the 97 kits analyzed, 24 were completed by SANEs from SARS in Minneapolis. Because SARS is currently the only SANE program in the state of Minnesota, it was assumed that the remaining rape kits were completed by a non-SANE. On another 8 kits this information was completely illegible. ...]for a total of 13 kits it was impossible to identify the person who collected the evidence and it would also be impossible to use this evidence in a court of law.

Report and prevent: A quality improvement project to protect nurses from violence in the emergency department: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 338-344.e7. doi:<https://doi.org/10.1016/j.jen.2020.02.010>

IntroductionMost nurses experience some form of workplace violence resulting in a stressful work environment, employee injury, and turnover. The aims of this project were to develop and evaluate strategies to improve the reporting of workplace violence as well as to empower emergency nurses to prevent assaults and protect themselves.**Methods**This quality improvement project had 2 phases. The phase I educational intervention focused on the importance of reporting workplace violence. Pre- and postintervention surveys measured experiences with workplace violence and reporting. The phase II educational intervention focused on de-escalation and self-protection strategies, training, safety, confidence, and emergency nurses' preparedness to defend themselves. Responses were analyzed using Wilcoxon signed-rank and McNemar tests.**Results**Twenty-five emergency nurses participated in phase I, with >90% reporting that they had been assaulted in the past month. Most did not report a workplace assault, which was unchanged after the intervention. Thirty-four emergency nurses participated in phase II, with a postintervention increase reported in the perceived helpfulness of learning self-protection techniques for the emergency nurses' work life ($Z = -2.179$, $P = 0.029$).**Discussion**This study was consistent with the literature in that emergency nurses often do not report workplace assaults. Most of the emergency nurses surveyed had been assaulted. Although the educational interventions did not achieve the desired outcome, it is clear that additional interventions for individual nurses and institutions need to be developed and refined to increase reporting and prevent workplace assaults.

Board of directors: JEN. (2020). *Journal of Emergency Nursing*, 46(3) doi:[https://doi.org/10.1016/S0099-1767\(20\)30103-3](https://doi.org/10.1016/S0099-1767(20)30103-3)

Collaborative rescue from double trouble: Case review: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 364-367. doi:<https://doi.org/10.1016/j.jen.2020.02.005>

A 76-year-old woman was discovered down in the bathtub of her home, aphasic with right-sided paralysis by her husband, who called 911. She had no previous significant medical history, but her husband reported complaints of right arm and chest pain from the patient in the previous 2 days. Although transporting prehospital emergency medical service (EMS) providers did not perform a 12-lead electrocardiogram (ECG), they did place the patient on monitoring equipment for lead II heart rate, pulse oximetry, and noninvasive blood pressure measurements. Her initial vital signs included a blood pressure of 180/110 and sinus tachycardia with a rate of 120 beats per minute. She was afebrile. EMS providers performed a stroke scale and suspected that the patient was experiencing a large-vessel occlusion (LVO) cerebrovascular accident (CVA). She was transported emergently to a comprehensive stroke center. This comprehensive stroke center is a 630-licensed-bed facility with associated accredited chest pain center and primary percutaneous coronary intervention (PCI) capabilities.

Information for readers: JEN. (2020). *Journal of Emergency Nursing*, 46(3) doi:[https://doi.org/10.1016/S0099-1767\(20\)30104-5](https://doi.org/10.1016/S0099-1767(20)30104-5)

Diagnostic sensitivity of the dynamic appraisal of situational aggression to predict violence and aggression by behavioral health patients in the emergency department: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 302-309. doi:<https://doi.org/10.1016/j.jen.2019.12.006>

IntroductionThe Dynamic Appraisal of Situational Aggression (DASA) is an assessment tool that has been validated to predict violent or aggressive behavior in psychiatric inpatient settings. Its validity has not been established for use in the emergency department.**Methods**The DASA was implemented within the electronic health record of an academic medical center with inpatient psychiatric services. A retrospective analysis was conducted using Spearman rank-correlation coefficients to compare a final risk score with the subsequent occurrence of violence or aggression, defined as the use of hard leather physical restraints or the administration of intramuscular sedative medication. A receiver operating characteristic curve was used to summarize the predictive accuracy of the tool to assess aggression in behavioral health patients in the emergency department.**Results**A total of 3,433 scores were analyzed, representing 1,548 patients. The DASA had predictive validity with increasing scores comparing all tested cutoff scores against incidence of violence and aggression. The area under the curve comparing scores of 0 versus more than 0 was 0.79. The median time to subsequent aggression was 110 minutes.**Discussion**The DASA has predictive validity for use in evaluating behavioral health patients in the ED setting in an urban academic medical center. The tool is capable of predicting violence or aggression within a time frame conducive to the implementation of noninvasive measures. The DASA should be tested in other ED settings to further establish its predictive validity.

Violence against nurses in the triage area: A mixed-methods study: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 384-397. doi:<https://doi.org/10.1016/j.jen.2020.02.013>

IntroductionWorkplace violence is a serious occupational problem among nurses in emergency departments. The aim of this study was to better understand workplace violence experienced by triage nurses.**Methods**A mixed-methods study was carried out with 27 Italian nurses involved in the triage area of an emergency department. Quantitative data were collected using the Violent Incident Form and qualitative data were obtained from 3 focus groups.**Results**Ninety-six percent of triage nurses had suffered an episode of violence during the previous year. Participants reported that perpetrators of violence were primarily patients' relatives or friends (62%), usually male and in a lucid state of consciousness. The aggressor was a male patient in 31% of violent episodes. Male nurses reported only verbal abuse, unlike female nurses who suffered both physical and verbal episodes. Females received assistance from other staff during the aggression event more frequently than males, and females more frequently suffered from physical injury. Only physical and verbal aggressions were associated with physical injury. Four main themes emerged from the focus groups.**Discussion**Nurses reported that high exposure to workplace violence in triaging had significant consequences on their psychological well-being and on their behavior at work and at home. Violence, perceived as a personal and/or professional injury owing to insufficient organizational support, led professionals to experience feelings of resignation and to believe that abuse was an inevitable part of the job. Nevertheless, in our study, the precipitating factors were investigated, suggesting several possible solutions to limit this phenomenon.

Forensic nurse hospitalist: The comprehensive role of the forensic nurse in a hospital setting: JEN. (2020). *Journal of Emergency Nursing*, 46(3), 286-293. doi:<https://doi.org/10.1016/j.jen.2020.03.002>

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