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Restraint Use: Evidence-Based Practice

1.00 Contact Hour

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Outcomes

92%≥ of participants will be able to identify situations where restraint use may be indicated.

Objectives

After completing this course, the participant will be able to:

1. Define restraints and their indication for use.
2. Describe Joint Commission requirements for restraints.
3. Characterize de-escalation techniques.
4. Summarize types of restraints.
5. Outline complications associated with restraint use.

Introduction

Patient restraint and seclusion are controversial but sometimes necessary aspects of medicine and nursing. Violence in healthcare settings has reached epidemic levels, with up to 50 percent of healthcare providers experiencing some form of violence during their careers (Van Gorder, 2022; Moore & Pfaff, 2023; Parkes & Tadi, 2022). As reported in the National Crime Victimization Survey, healthcare workers face a 20% higher chance of being victimized in the workplace when compared to other workers (Parkes & Tadi, 2022). Providers must be prepared to cope effectively with agitated patients to reduce the risk of serious injury to either the patient or the provider (Moore and Pfaff, 2023). Several factors may contribute to a patient's risk for becoming violent or self-destructive, including environment, social and medical history, interpersonal relations, genetics, neurochemistry, endocrine function, psychiatric illness, and substance abuse (Moore & Pfaff, 2023). The mnemonic FIND ME (function, [i.e., psychiatric], infection, neurologic, drugs, metabolic, endocrine) may help remember the possible etiology of delirium and violence (Moore & Pfaff, 2023).

In a medical or mental health setting, restraint usage falls into one of three categories: physical, chemical, or seclusion. Restraints are defined as any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move arms, legs, or head freely. A drug or medication used as a restriction to manage the patient's freedom of movement and not as a standard treatment or dosage for the patient's condition can also be considered a restraint (Centers for Medicare and Medicaid [CMS], 2008). CMS also considers seclusion, the involuntary confinement of a patient, as a form of restraint and is only allowed for violent or self-destructive behaviors.



Restraint

According to CMS (2008), the type or technique of restraint or seclusion used must be the least restrictive intervention that will be effective to protect the patient, staff member or others from harm. The use of restraints relies on the clinical provider's judgment of the immediate risk the patient poses to themselves, other patients, the staff working on the unit, and visitors.

Certain conditions may make restraint use necessary when caring for patients. They may include violent behaviors, impaired cognition, increased dependency, history of falls, or patients at increased risk of falling due to impaired mobility. Emergency room clinical providers must consider all possibilities when caring for agitated patients, including underlying psychiatric disease, alcohol abuse, drug intoxication, or other life-threatening disorders, including metabolic disorders. Clinical providers must attempt to collect a detailed history from the patient and their family members. Physical examination should aim to identify the patient's underlying cause of the agitation. Any underlying medical conditions should be addressed accordingly to prevent unnecessary treatments. Other medical conditions that induce agitation include pain, hypoxemia, infection, hypoglycemia, and head trauma (Francis, 2019).

Restraints should be a last resort, and methods of de-escalation should be tried when caring for agitated patients. Using restraints when caring for patients in healthcare can negatively affect patients and clinical providers. The consequences of restraint use can be physical, social, and psychological. Physical consequences of restraint use include pressure ulcers, incontinence, and bruising. Social consequences include isolation and withdrawal; psychological consequences include depression, anger, and fear. Restraint use can also negatively affect family members by evoking anger, worry, and guilt.

Although restraint use can be life-saving when caring for a patient who is altered, violent, or psychotic, there can be adverse effects associated with using restraints. Mechanical restraints can inhibit further rapport with the patient, and applying restraints can be traumatic and cause them to be more withdrawn. Restraints should be used with caution.

Joint Commission Requirements

Restraints should be applied rapidly and safely by personnel who are trained in the application of restraints. When applying restraints on an actively violent patient, a team of five members is recommended: one team leader and one individual for each limb. Occasionally, the presence of multiple team members will be enough to subdue the patient without the need to apply restraints. The team leader oversees directing the procedure of restraining the patient. The patient and family members must be provided with information about why the restraints are being applied. Also, they should always get clear instructions on the procedure to maintain patient and staff safety. When the patient is restrained, offer prescribed medications or call a clinical provider to prescribe medications (Parkes & Tahi, 2022).

State, hospital, and facility policies usually govern how frequently restrained patients are evaluated, including their vital signs. They also detail rules on skin integrity, toileting, range of motion, etc. The restraints can and should be removed when the patient is calm and quiet. However, staff should continue to monitor the patient for their safety and that of other patients and the staff (the Joint Commission [TJC], 2022).

TJC has stringent requirements and a list of required assessments for using restraints. In the hospital setting, a timed and dated physician order with frequent rechecking is required for patients in restraints, including seclusion with a security watch (TJC, 2022). Once a patient is restrained, they require periodic and frequent evaluation to maintain their safety. According to TJC (2022), all restraint policies must state that the restraints be removed as soon as the patient is no longer a risk to themselves or others.

Restraints and seclusion cannot be administered longer than four hours for adults (older than 18 years of age), two hours for children and adolescents (9-17 years of age), or one hour for children (less than nine years of age) unless state laws are more restrictive (Parkes & Tadi, 2022). Points of assessment include:

- Neurologic status- level of consciousness, degree of agitation, pupil examination, motor examination, and sensory examination.
- Vital signs- heart rate, blood pressure, temperature, oxygen saturation, and respiratory rate.
- Motor examination- motor strength in the upper and lower extremities.
- Sensory examination- ensure that the patient has retained sensation in both the upper and lower body and all extremities.
- Vascular evaluation- as detailed above, capillary refill, distal pulses, and vital signs.
- Other- patient comfort, skin evaluation under and around the restraints, hydration, personal hygiene, and toileting needs.

De-escalation Techniques

De-escalation techniques should be considered instead of restraint use. Signs of impending violence include provocative behavior, an angry demeanor, loud and aggressive speech, tense posturing (e.g., clenching fists), pacing, and aggressive acts such as pounding walls, throwing

objects, and hitting oneself (Moore & Pfaff, 2023). Watching for these signs can be an advantage in helping defuse potentially violent encounters with patients.

One simple and often underused technique is asking the patient, "How can we assist you?" This question allows the clinicians to engage the patient while displaying compassion. Often this is sufficient to put an agitated patient at ease. In addition, the staff should offer the patient food and drinks and help with toileting if appropriate. The goal is to treat the patient with dignity and empathy. If the patient continues to be agitated, untrained staff should immediately enlist the help of a trained staff member who can help defuse the situation. If the patient continues to be violent despite these measures, facility security should be called to help keep the patient, staff, and other patients safe. When security does arrive, they should gather at a safe distance but within the patient's view.

Restraint Use in the Elderly

Members of the restraint team include nurses, doctors, technicians, nurse's assistants, physician assistants, security officers, or police officers. All of these individuals and more should be properly trained on restraint use. Knowing when to use restraints and when policies and protocols are sufficient to prevent deficiencies in caring for older adults is important. Several factors contribute to deficiencies when caring for elderly patients, including a lack of experience in caring for older adults, mistaking functional decline in older adults for a normal aging process, and lack of access to resources.

Too often, concerns about safety in older adults are handled by limiting their mobility. However, research has shown that safety concerns can be decreased by maintaining and restoring functional ability among older adults. Nurses must have organizational support to assist them in developing practices that encourage nursing leaders to create practice systems to preserve functional ability. Leaders at the institutional level must also address organizational factors such as poor staffing ratios, which may indirectly contribute to safety concerns in the healthcare setting. Hospitals and other institutions are encouraged to assess potential safety threats and address them accordingly.

Types of Restraints

Seclusion

Seclusion can be used in both inpatient units and specialized psychiatric units. Its use is well documented in the literature. It was frequently used in the 1980s but has declined significantly since then, given staff shortages, specifically nursing staff shortages. In addition, most hospitals now lack adequate space to provide seclusion to all patients who need it. Seclusion remains a very effective technique for aggressive patients when appropriate policies and accommodations are in place.

Note that seclusion can be combined with other forms of restraints, including physical or chemical restraints. Patients placed in seclusion must be reassessed as often as those placed in physical restraints (TJC, 2022). There are circumstances when seclusion is inappropriate; for example, if a patient needs constant monitoring due to suicidal ideation, self-injurious behavior, hemodynamic instability, or overdose (Parkes & Tadi, 2022).

Limb Restraints

Physically restraining a patient's limbs is the most common form of physical restraint in clinical practice. Limb restraints can be made from different materials, including leather and cotton. In general, restraints have to be comfortable, easy to apply, easy to remove, and easy to clean. Of note, leather restraints are difficult to break or tear and are also difficult to clean if they get soiled from bodily secretions. Sometimes hard leather restraints have difficult application and removal processes relative to soft restraints. Furthermore, that can be problematic when the patient crashes in an acute setting. Leather restraints are usually reserved for combative and violent patients in whom the need for secure restraints is considered more important and worth the time it takes to apply or remove them (Roberts et al., 2019.).

Soft Restraints

Soft limb restraints are made from cotton or foam material and are intended to be used as single-use devices. They are less rigid than hard restraints and are thus easier to apply. Soft restraints are reserved for patients who are agitated but are less aggressive. Soft limb restraints are less secure than hard leather restraints (Roberts et al., 2019.).

Five-Point Restraints or Belts

Five-point restraints, or the addition of a belt, are used as an adjunct to the four-point restraint. They restrict movement of the patient's torso, pelvis, or thighs. Five-point restraints are reserved for patients who continue to be dangerous to themselves or others while in a four-point restraint. It can also be used in patients whose behavior prohibits the medical staff from administering medically necessary care, including therapeutic interventions (Roberts et al., 2019).

Patients with a five-point restraint are at increased risk of aspiration because they cannot turn to their sides if they start vomiting. Also, note that the five-point restraint must be applied tight enough to prevent the risk of accidental suffocation in case the patient tries to slip under the restraint. These restraints usually require quick-release locks in case of an emergency (Roberts et al., 2019).

Jackets and Vests

These restraints are reserved for those who are inpatients or are patients in longer-term facilities. There are reports of associated deaths with the use of jackets or vests related to choking and suffocation (Roberts et al., 2019). In general, jackets and vests are rarely used in emergencies (Roberts et al., 2019.).

Leg Restraints

Police and law enforcement characteristically use these to prevent running and kicking. It is typically used in the transportation of patients. Leg restraints are limited in the inpatient or emergency setting (Roberts et al., 2019.).

Chemical Restraints

Chemical restraints can include medications, such as benzodiazepines and antipsychotics. Chemical restraints can be given alone or in combination with physical restraints. The goal always remains to use the least restrictive method to keep the patient and staff safe. The

medication choice is based on rapid onset and side effect profile. The choice of chemical restraint will vary based on individual circumstances (Parkes & Tadi, 2022).

Severely violent (rapid onset choice): Drugs appropriate for the severely violent patient include first-generation or second-generation antipsychotics (e.g., haloperidol intramuscular injection or olanzapine intramuscular injection). Other options include benzodiazepines (e.g., lorazepam or midazolam intravenous or intramuscular administration) or a combination of antipsychotics and benzodiazepines (Parkes & Tadi, 2022).

Drug intoxication: In a scenario where the client is agitated by drug intoxication or withdrawal, benzodiazepines would be appropriate. However, benzodiazepines would be contraindicated in the setting of intoxication with a central nervous system depressant (Parkes & Tadi, 2022).

Hallucination: Agitation can occur when a patient hallucinates or experiences delusions. In this scenario, both first- and second-generation antipsychotics would be appropriate. Caution should be used when administering first-generation antipsychotics as they can cause extrapyramidal side effects as well as QT prolongation that can potentially lead to dysrhythmias like Torsades de Pointes (Parkes & Tadi, 2022; Stroup & Gray, 2018). It is often impossible to fully assess the agitated or violent patient before administering these drugs. Still, it is important to understand that an electrocardiogram (EKG) is recommended to be completed before administering these medications. If not possible, an EKG should be completed once the patient is more stable, as higher doses of antipsychotics increase the incidence of QT prolongation (Parkes & Tadi, 2022).

Indications for Restraint Use

Restraints prevent agitated or violent patients from harming themselves, other patients, or staff members. Restraints should only be used as a last resort after de-escalation techniques have failed. Patients identified as imminent danger to themselves or others should be promptly restrained. Patients who are altered may need to be restrained to ensure they receive life-saving medical care — for example, intubated patients and sedated patients requiring life-saving treatment. In addition, patients at risk for elopement may also be restrained in very specific circumstances.

Contraindications to Restraint Use

Restraints should not be used when de-escalation techniques are adequate. Restraints also should not be used on fractured limbs, patients with open wounds, or skin infections. Also, restraints should be used cautiously in patients with impaired vascular circulation. Five-point restraints should be avoided in patients with ostomies, feeding tubes, pelvic fractures, or multiple rib fractures. Finally, patients with severe pulmonary or cardiovascular disease may not tolerate the presence of a five-point restraint over their chest cavity. As such, they should be avoided in patients with these conditions.

Complications Associated with Restraint Use

- Local skin breakdown: Physically restricting patients can prevent them from repositioning themselves, increasing their risk of developing pressure ulcers.
- Vascular compromise: If restraints are applied too tight, there is an increased risk of vascular compromise of a limb.
- Respiratory restrictions: Patients with moderate to severe respiratory disease are at risk for respiratory compromise if they are physically or chemically restrained. For example, a

patient with severe obstructive lung disease is at increased risk of respiratory failure if they are in a vest restraint or receive benzodiazepines as a form of chemical restraint.

- Cardiovascular compromise: Patients with severe congestive heart failure who cannot lay flat may be at increased risk of cardiovascular and eventually respiratory compromise if physically restrained and forced to lay flat.

Case Study

You are an emergency department nurse assigned to care for a patient who presented with altered mental status and agitation after being arrested for a recent fistfight outside a bar. You receive a report from another nurse at shift change who informs you that the patient has been extremely disrespectful and agitated throughout his presentation today, necessitating the emergency department physician to order physical restraints. Given his altered mental state, the previous nurse could not obtain a coherent past medical history from the patient. Your physical examination reveals tremors; the patient appeared to have visual and auditory hallucinations and appeared to slip into varying states of consciousness. In addition, you do not smell any alcohol or other intoxicants on his breath. Upon a quick review of the chart, you recognize that the patient has had 16 prior admissions associated with alcohol abuse or intoxication over the past two years. What are your next steps?

Discussion

The patient's past medical history and your findings during the physical exams should raise the possibility of alcohol withdrawal. Early alcohol withdrawal symptoms can present as early as six to eight hours after their last drink, including mild tremors, diaphoresis, palpitations, and anxiety. Later symptoms of alcohol withdrawal include auditory, visual, and tactile hallucinations, marked tremors, and hyperactivity. The most feared complication of alcohol withdrawal is delirium tremens, associated with seizures, worsened agitation and hallucinations, autonomic hyperactivity, or sympathetic hyperactivity. As the nurse caring for the patient, you should inform the rest of the clinical team about your suspicions of alcohol withdrawal, and the patient should receive prompt treatment, which may eliminate the need for physical restraints.

Conclusion

As healthcare professionals, our responsibility and commitment to our patients is to advocate and care for them even when they cannot make appropriate decisions. At times, ensuring a patient's safety and the safety of others will necessitate that they are placed in restraints. If restraints are necessary, healthcare providers must provide compassionate care compliant with state, federal, and institutional recommendations. At times, healthcare providers will have to advocate limiting restraint use in patients who are inappropriately restrained or can be de-escalated with other techniques. As such, we need to remain informed about the indications, contraindications, and alternatives to restraints.

Implicit Bias Statement

CEUFast, Inc. is committed to furthering diversity, equity, and inclusion (DEI). While reflecting on this course content, CEUFast, Inc. would like you to consider your individual perspective and question your own biases. Remember, implicit bias is a form of bias that impacts our practice as healthcare professionals. Implicit bias occurs when we have automatic prejudices, judgments, and/or a general attitude towards a person or a group of people based on associated stereotypes

we have formed over time. These automatic thoughts occur without our conscious knowledge and without our intentional desire to discriminate. The concern with implicit bias is that this can impact our actions and decisions with our workplace leadership, colleagues, and even our patients. While it is our universal goal to treat everyone equally, our implicit biases can influence our interactions, assessments, communication, prioritization, and decision-making concerning patients, which can ultimately adversely impact health outcomes. It is important to keep this in mind in order to intentionally work to self-identify our own risk areas where our implicit biases might influence our behaviors. Together, we can cease perpetuating stereotypes and remind each other to remain mindful to help avoid reacting according to biases that are contrary to our conscious beliefs and values.

References

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