

# Module 14.

# Physical Restraint Reduction for Older Adults

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## Staff Development Partners Edition Instructor Guide

### **THIS MODULE INCLUDES:**

1. Expected Staff Cognitive Competencies
2. Expected Staff Clinical Competencies
3. Content Outline including Learning Activities
  - a. REMINDER TO INSTRUCTOR: Read activities in Instructor Guide and prepare materials for activities in advance
4. Scripted PowerPoint Presentation
5. 10-item Post Test
6. Resources



## MODULE 14. PHYSICAL RESTRAINT REDUCTION FOR OLDER ADULTS

### **EXPECTED STAFF (Cognitive) COMPETENCIES**

1. Define physical restraint and describe the characteristics of restraint use.
2. Identify the older adults most at risk of being physically restrained.
3. Discuss myths and facts about physical restraint use.
4. Discuss the reasons most frequently given by health professionals for using physical restraint.
5. Describe morbidity and mortality risks associated with physical restraint.
6. Plan the nursing care of older adults, using restraint-free strategies.
7. Explain alternatives to the use of physical restraints.

Note: Chemical restraints are not covered in this Module. See Module 13. Polypharmacy of Older Adults.

### **EXPECTED STAFF (Clinical) COMPETENCIES**

<b><u>Behaviors</u></b>	<b><u>How validated</u></b>	<b><u>Novice</u></b>	<b><u>Advanced Beginner</u></b>	<b><u>Competent</u></b>	<b><u>Proficient</u></b>	<b><u>Expert</u></b>
1. Justify the use of a physical restraint (Posey, mitts, chairs with fixed trays, sheets, siderails) and document reassessment of patient	Review documentation of clinical justification and clinical monitoring					
2. Adhere to organizational standards when caring for a patient who is physically restrained.	Direct observation					
3. Document behavior of patient who is physically restrained	Review accuracy in documenting assessment findings					
4. Intervene to eliminate or sharply curtail the use of physical restraints (e.g. alternate strategies to prevent falls, to prevent treatment interference, and to manage agitated and / or combative behavior	Direct observation of least restrictive or restraint-free strategies used while caring for a patient who is at risk for restraint application.					



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### Competency 1. Define physical restraint and describe the characteristics of restraint use.

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- A. **Physical restraints** are defined as any manual method or physical or mechanical device, material or equipment attached or adjacent to the person's body that he cannot remove easily which restricts freedom of movement or normal access to one's body. It is not a usual and customary part of the diagnostic or treatment procedure indicated by the person's medical condition or symptoms; and does not serve to promote the person's independent functioning. Restraints can be dangerous in and of themselves.
- B. Medical protection devices, which protect the patient from exacerbating the underlying illness or injury includes splints applied to a fractured extremity. Because it is a standard medical therapy, it does not constitute a restraining therapy. **Medical immobilization** is a temporary immobilization for the performance of and recovery from a medical or surgical treatment (e.g. surgical positioning, IV arm boards, bulky dressing to protect surgical treatment sites).
- C. Physical restraints are applied to patients who have been legally detained. The use of restraints under these circumstances is considered **forensic restraint**.
- D. The types of devices that are considered physical restraints include:
- D.1. **Soft wrist and** ankle restraints.
  - D.2. **Straps and belts** are used in a similar fashion as a vest restraint, but are less restrictive in movement. The belt wraps around the waist and is secured to a chair or bed.
  - D.3. **Two-, Three- or Four-point wrist and ankle restraints.** The number designates how many extremities are being restrained. For example, the two-point restraint would only restrict movement on the wrists.
  - D.4. **Wheelchair safety bars.**
  - D.5. **Vest and jacket restraints** always cross in the back of a person and are applied to the chest. This confines a person to a bed or chair and prevents them from moving. These restraints carry the greatest risk to life since if a person tries to get out of the position they are confined in, they can become strangulated and die.
  - D.6. **Mitt restraints** cover an entire hand and fingers typically go in one of the five inside pockets unless the hand could be grasping a towel inside the restraint.
  - D.7. **Chairs with lapboards.**
  - D.8. **Beds with siderails, and bedsheets.**



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- E. Despite standards aimed at minimal or no restraint use, approximately 15% of nursing home residents and 6% to 17% of patients in acute care settings, spend a portion of their day in restraints, or confined inappropriately by siderails.
  - F. Among older patients, the incidence of restraint use is higher. It increases to 18% to 20% among those 65 years old or older, and up to 22% for those aged 75 years or older.
  - G. Of older patients who fall, 13% to 47% are physically restrained. Serious injuries from falls are greater when the persons who fall have been placed in physical restraints.
  - H. Among restrained patients, 20% to 50% demonstrate significant depression, agitation, confusion, withdrawal, or anger as a result of restraint use.
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### **Competency 2. Identify the older adults most at risk of being physically restrained.**

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- A. Older adults who are at most risk of being physically restrained are those who present with:
    - A.1. unsteady mobility or history of falling
    - A.2. greater severity of illness or multiple debilitating conditions
    - A.3. cognitive impairment
    - A.4. physical impairment, including posture and body alignment
    - A.5. psychiatric condition
    - A.6. recent surgical procedure
    - A.7. medical devices that restrict mobility (i.e., intravenous lines, mechanical ventilators)
  - B. Caregiver attitudes may drive the use of restraints on older adults.<sup>1</sup> The nurse may believe in or prefer to use sedatives and pharmacologic therapies in lieu of physical restraints, or vice versa.
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### **Competency 3. Discuss myths and facts about physical restraint use.**

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Myth            “The old should be restrained because they are more likely to fall and seriously injure themselves.”

Fact:            • Restraints do not remove the risk of falls and serious injuries. In fact, studies

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<sup>1</sup> Happ, M.B. (2000). Preventing treatment interference: The nurse’s role in maintaining technologic devices. *Heart Lung* 29. 60-69.



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have shown that the incidence of falls and fall-related injuries increases when patients are restrained.

Myth: “The moral duty to protect from harm requires restraint.”

Facts:

- Studies have shown that the need to prevent life-threatening events was perceived by the nurse as the justification for the use of restraints. Physical restraints, applied in the belief that they protect clients, have no known therapeutic value and may be hazardous. “Protecting” older adults with physical restraints places them at high risk for numerous short-and long-term physical, psychological, and behavioral consequences.

Myth: “Failure to restrain puts individuals and facilities at risk for legal liability.”

Facts:

- Federal and state regulations restrict use of physical and chemical restraints for nursing home residents; JCAHO guidelines limit the use of restraint and seclusion in hospitals and other healthcare facilities. To hold a professional liable requires evidence that minimum standards of practice have been ignored or violated.

Myth: “It doesn’t really bother older people to be restrained.”

Fact:

- Interviews with restrained older people reveal a range of responses to restraint: anger, fear, humiliation, resistance, discomfort, demoralization, resignation, and denial.

Myth: “We have to restrain because of inadequate staffing.”

Facts:

- Studies have shown that restraint reduction can be accomplished without additional staffing.<sup>2</sup> Many facilities have eliminated or reduced restraint use, without increases in staffing. The hospital / facility and its employees are the decision-makers for using restraints, based on nursing observation of patient behaviors. The facility staff has the ultimate responsibility for harm resulting from restraint use. More time is required to care for patients who are restrained. They must receive more frequent inspection, release, exercise, use of toilet, monitoring, and evaluating than those who are not restrained.

Myth: “No interventions, other than physical restraint, are available.”

Facts:

- 1) Interventions for meeting clients’ needs are available and have been successful in eliminating physical restraints. Four categories of individualized interventions are available: (a) physiologic approaches, (b) psychosocial approaches, (c) activity and exercise programs, and (d) environmental modification.

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<sup>2</sup> Johnson, D. (1995). Restraint-free care: A look back, *Nursing Homes*, 44(7). 26-30.



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### **Competency 4. Discuss the reasons most frequently given by health professionals for using physical restraint.**

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Studies have shown staff attitude influences the decision to restrain a patient. Physical restraints are applied in the belief that they will protect patients from harm. The most common reasons given by health care providers for using restraints include the intent to:

- A. **Prevent falls and protect the patient from harm.** Studies found that the most common reasons nurses gave for applying physical restraints focused on patient protection and fall prevention.
- B. **Prevent interference with medical treatments** such as self-extubation. It has been argued that self-extubation, in and of itself, should not be regarded as a morbid event and that 63% to 89% of self-extubations do not require reintubation.<sup>3,4</sup> In fact, it is critical to frequently reassess a patient's suitability for early extubation because it may eliminate the source of the patient's agitation, which is the major reason health care providers restrain patients.
- C. **To protect medical devices** such as IV lines, indwelling urinary catheters, NG-tubes, dressings and other forms of drainage easily accessible to the patient.
- D. **Decrease legal liability and family pressure.** Restraints should not be used for legal reasons because the legal risk from physical restraint use is greater than the legal risk from not using restraints. Sometimes, families request that the patient be restrained. Families should not be decision-makers for restraint use but they may have their say in the care of a loved one. Family involvement and support is critical to secure so that a restraint-free environment can be possible.
- E. **Control disruptive behaviors**, such as agitation, wandering, or combativeness. A major factor driving the use of restraints is the underlying confusion and agitation experienced by patients. Some medical conditions like sepsis may cause patient confusion. Discomfort, surgical and diagnostic procedures, anxiety, and sleep deprivation can result in agitation. If a patient is in ICU, agitation can interfere with mechanical ventilation, cause myocardial stress and cerebral ischemia. Agitation can bring about patient removal of nasogastric tubes, arterial catheters, central venous catheters, urinary catheters, and self-extubation.
- F. A questionnaire "**Perception of Restraint Use Questionnaire (PRUQ)**", modified for use in acute care settings, determines the relative importance caregivers give to reasons for using physical restraints with the older adult patient.<sup>5</sup> [..\References\Perceptions of Restraint Use Questionnaire.pdf](#)

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<sup>3</sup> Baer, C.L. (1998). Is there an answer to preventing unplanned extubations? *Critical Care medicine* 26: 989-990.

<sup>4</sup> Winslow, E. (1996). Do restraints really protect intubated patients? *American Journal of Nursing*. 96, 51.

<sup>5</sup> University of Pennsylvania School of Nursing (1990). Perceptions of Restraint Use Questionnaire (PRUQ) Modified from Strumpf, N.E., Robinson, J.P., Wagner, J.S. & Evans, L.K. (1998). Restraint-free care: Individualized approaches for frail elders, New York: Springer.. Permission to use granted by the University of Pennsylvania School of Nursing.



**Competency 5. Describe morbidity and mortality risks associated with physical restraint.**

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**A. Short-term Complications** include:

- A.1. Hyperthermia
- A.2. New-onset bowel and bladder incontinence
- A.3. Constipation
- A.4. Decreased appetite
- A.5. Pressure ulcers
- A.6. Muscle weakness
- A.7. Injury to nerve and joints,
- A.8. Increased risk of nosocomial infections
- A.9. Pneumonia and respiratory complications

**B. Severe or Permanent Injuries.** Prolonged use of physical restraints is associated with negative clinical outcomes, including those related to consequences of immobility.

- B.1. **Spiraling immobility** is the process where in the older person is perceived to be at risk for falling, therefore is restrained to prevent falling. The person becomes unable to walk due to prolonged immobilization. The combination of two or more of the following conditions, muscle weakness, joint contractures, loss of mobility, bone loss, and problems with balance and coordination, predisposes the older adult to falls.
- B.2. Restrained patients are **subject to strangulation**, renal failure, brachial plexus nerve injuries, axillary vein thrombosis, and compressive neuropathy.
- B.3. Hypoxic encephalopathy
- B.4. Deconditioning

**C. Most Serious**

- C.1. **Death from strangulation**, such as head and body entrapment between bedrails, mattress, and footboard can occur because the persons who are restrained are those with altered mental status, restlessness, confusion, lack of muscle control or a combination of all.

**D. Psychological Effects.** The adverse psychological effects of restraints include:

- D.1. Anger
- D.2. Aggressiveness
- D.3. Demoralization
- D.4. Humiliation



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- D.5. Infantization
  - D.6. Feelings of low self worth
  - D.7. Depression
  - D.8. Impaired social functioning and social isolation
- E. The perception of patients who have been restrained is not well documented. Fifteen ICU patients were interviewed after they were discharged from ICU, and only 40% remembered being restrained and they related most of their distress to the discomfort of intubation and to their hallucinations, not to their being restrained.<sup>6</sup> It would be helpful to build knowledge about the lived experience of being restrained. The “Subjective Experience of Being Restrained” (SEBR) is a structured interview guide used with patients to obtain information about their feelings and perceptions while they were restrained.<sup>7</sup> [..\..\References\Subjective Experience of Being Restrained \(SEBR\).pdf](#)<sup>7</sup>
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### **Competency 6. Plan the nursing care of older adults, using restraint-free strategies.**

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- A. The American College of Critical care Medicine Task Force (2001 – 2002) developed nine recommendations with regard to the use of physical restraints and pharmacologic therapies to maintain patient safety in the intensive care unit.<sup>8</sup> These guidelines may apply to all patients:
- A.1. Institutions and practitioners should strive to create the least restrictive but safest environment for patients in regard to restraint use.
  - A.2. Restraining therapies should be used only in clinically appropriate situations and not as a routine component of therapy.
  - A.3. Patients must always be evaluated to determine whether treatment of an existing problem would obviate the need for restraint use.
  - A.4. The choice of restraining therapy should be the least invasive option capable of optimizing patient safety, comfort, and dignity.
  - A.5. The rationale for restraint use must be documented in the medical record. Orders for restraining therapy should be limited in duration to a 24-hour period. New orders

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<sup>6</sup> Minnick, A., Leipzig, R.M., Johnson, M.E. (2001) Elderly patients’ reports of physical restraints experiences in intensive care units. *American Journal of Critical Care* 10, 168-171.

<sup>7</sup> Evans, L.K. & Strumpf, N.E. (1988). Instruments from the program of research on individualized care/restraint reduction: 1986-1999.

<sup>8</sup> Maccioli, G.A., Dorman, T., Mazuski, J.E., McLean, B., Brown, B.R., et al. (2003). Clinical practice guidelines for the maintenance of patient physical safety in the intensive care unit: Use of restraining therapies – American College of Critical Care Medicine Task Force 2001 – 2002. *Critical Care Medicine*, (31 (11)). 2665-2676.



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- should be written after 24 hours if restraining therapies are to be continued
- A.6. Patients should be monitored for the development of complications from restraining therapies at least every 4 hours, more frequently if the patient is agitated, or if otherwise clinically indicated.
  - A.7. Patients and their significant others should receive ongoing education as to the need for and nature of restraining therapies.
  - A.8. Analgesics, sedatives, and neuroleptics used for the treatment of pain, anxiety, or psychiatric disturbance should be used as agents to mitigate the need for restraining therapies and not overused as a method of chemical restraint.
  - A.9. Patients who receive neuromuscular blocking agents must have adequate sedation, amnesia, and analgesia. The use of neuromuscular blocking agents necessitates frequent neuromuscular blockade assessment to minimize the serious sequelae associated with long-term paralysis.
- B. Establish restraint-free care as the standard for older adults.
  - C. Develop a nursing care plan tailored for each person's presenting problems, risk factors, and needs.
  - D. Consider weaning and early extubation for patients on mechanical ventilator.
  - E. Use adaptive equipment for impaired mobility; institute physical and occupational therapy to restore or maintain independent function; increase endurance, gait, and balance training.
  - F. Institute appropriate fall prevention strategies. Confused older adults feel safer when a staff person or family member is in the room.
  - G. Use appropriate management strategies to treat behavioral symptoms (screaming, agitation, wandering).
  - H. Institute alternatives or modifications, as appropriate to medical devices (i.e., hep-lock versus continuous intravenous).
  - I. Incorporate family / surrogates into treatment plan, especially when caring for confused older adults. Autonomy presupposes a competent patient or an available surrogate to represent the patient's best interests. Language and cultural barriers, emotional distress, delirium, sensory impairment are conditions that may impair a patient's or a surrogate's decision.
  - J. Become familiar with statistics and institutional guidelines, policies, and procedures regarding restraint use. Evaluate compliance at unit and institutional levels.



**Competency 7. Explain alternatives to the use of physical restraints.**

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- A. Pharmacologic agents are used to treat the patient's agitation
- B. Identify EARLY the problems causing the patient's discomfort and agitation. Urinary retention, malposition of an endotracheal tube and generalized discomfort causes agitation.
- C. Increase inpatient observation through video cameras.
- D. Music, frequent reorienting
- E. Allow the family greater access to the patient; allow them to visit audiotapes of family members. Ask the same staff to care for the patient.
- F. Alter the environment:
  - F.1. Reduce noise level to allow the patient to sleep and to reduce their agitation.
  - F.2. Turn TV off.
  - F.3. Use bed exit alarms.
  - F.4. Relocate patients closer to the nurse's station.
  - F.5. Use family members; get sitters.
  - F.6. Lower caregiver-to-patient ratio.



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### Learning Activity.

Ms. S. has been a nursing home resident for one year. She has Alzheimer's disease (early stage) and is mildly confused. Over a period of three months, Ms. S lost considerable weight and despite the staff's efforts to improve her nutritional intake, has continued to refuse most foods and fluids.

Ms. S was eventually evaluated and treated in the hospital for a duodenal ulcer. She has been readmitted to the nursing home but continues to refuse food. Staff members notice that she is becoming weaker and less mobile, and her skin is beginning to show early signs of pressure ulcer formation. The staff and Ms. S's family had collaboratively made the decision to begin a trial of nasogastric tube feeding. On numerous occasions, the nasogastric tube was found lying on the floor at the bedside; subsequently, wrist restraints were applied. Ms. S is no longer mildly confused: instead, she is distressed to the point of being hostile and aggressive with the staff. Her overall confusion is noticeably worse.

Ms. S eventually had a gastrostomy tube inserted. Shortly after the tube was placed, the staff found Ms. S picking at the tube site.

Ms. S's health status has deteriorated. She has become less mobile and resists any attempts to transfer her to a chair or ambulation. She developed bilateral pneumonia and related hypoxia, and was transferred to an acute care facility. She is currently intubated and has been placed on a respirator for ventilatory support. The night nurse found Ms. S pulling at her endotracheal tube after removing the adhesive tapes from her face.

Ms. S was transferred back to the nursing home with a tracheostomy tube leading to a T-piece for supplemental oxygen. A gastrostomy tube remains in place for enteral nutrition.

1. Question. Ms. S's nasogastric tube was found lying on the floor. Identify approaches that might be used to decrease or eliminate (a) Ms. S's attempts to dislodge the tube and physical restraint
2. Question. Ms. S was observed to be picking and pulling at the gastrostomy tube. Share ideas about responses to this new situation.
3. Ms. S was found pulling at her endotracheal tube, and the adhesive strips were already removed from her face. Discuss possible responses to pulling at the endotracheal tube and possible extubation.
4. Ms. S pulled at the tracheostomy ties until the ties came undone, dislodging the dressing. Identify approaches that can be used to eliminate interference with the tracheostomy and dressings.

