Module III  Safety

- Incidence
  - Estimated 44,000 to 98,000 deaths per year due to medical errors

- National Patient Safety Goals

- Physical Safety
  - Equipment/Beds
  - Doors – open or closed
  - Temperature, light, noise
  - Radiation
  - Thermal and electrical hazards
  - Emergency lights
  - Corridor handrails
  - Chemicals
  - Food safety

- Oxygen Use
  - Highly combustible, odorless, colorless
  - Will not spontaneously burn but can help ignite fire if spark is present
  - Check electrical equipment for sparks
  - Fire alarm
  - Turn off flow-valve if safe to do so
  - Remove pt
  - Close door
  - Post no smoking sign
  - Know location of fire extinguishers

- Safe Medication Administration
  - Medication Administration
  - Risk for medical errors
    - Overwork and fatigue of nurse
  - Six rights
    - What are they and why are they important?
  - Wear gloves for injections
  - NEVER recap dirty needles
    - Make safe needle disposal first priority following injection
  - Scanning ID band
  - Giving Pills Safely
    - Sit pt upright
    - Assess pt’s ability to swallow
    - Did they eat last meal without difficulty
    - One pill at a time
    - Have plenty of water available
    - May need to crush meds
      - Give with apple sauce or pudding
      - Which meds can’t you crush??
    - May need to check pt’s mouth
  - Drug Reactions
    - Side effects of drugs
      - May be harmless or fatal
        - Constipation, N/V, diarrhea
        - Bradycardia or ↓BP
        - Bleeding
    - Notify MD
  - Allergic Reactions
- May occur with initial dose or repeated administration
  - Mild
    - Urticaria
    - Rashes
    - Pruritis
    - Rhinitis
  - Severe
    - Bronchoconstriction
    - Peripheral vasodilation → shock and ↓ BP
- Drug/drug and drug/food
  - May lead to either increased effect of one or more of drugs
    - E.g.
      - Milk and tetracycline
      - Antacids and digoxin
- Teach pt about medications
  - If pt questions drug – STOP rethink safety
- Nurse needs to know about every medication given
  - What is drug
  - Why is it being given
  - Potential adverse reactions
- Documentation
  - Charting is vital
  - In court of law, not charted = not done!
  - Always chart immediately after giving drug
  - Never document before giving drug
  - If drug held, chart why
  - Document pt’s response to drug
- Medication Errors
  - Compose yourself
  - Report error to MD
  - Assess pt for adverse reaction
  - File an Incident Report
    - What is this?
    - How is it used?
    - Does it become part of the pt’s medical record?
  - Review cause of error and learn from mistake!

- Restraints
  - Restraint is the use of physical or mechanical devices to involuntary restrain the movement of the whole or a portion of a patient’s body for the reason of controlling his/her physical activities in order to protect him/her or others from injury and/or to protect the patient from impairing his/her effective therapy.
  - Types of Restraints
    - Posey jacket
    - Belt restraint
    - Mitten
    - Chemical
      - A medication that is used to control behavior or restrict the patient’s freedom of movement and is not a standard treatment for the patient’s medical or psychological condition
    - Side rails
  - Assessment
    - Physician’s order needed
• What information should be in the order?
• How often is it renewed?

○ Criteria for use of restraints
  • Reduce the risk for injury from falls
  • To prevent interruption in therapy
  • To prevent a pt from removing life support equipment
  • Reduce the risk of injury to others

○ Safety Precautions when using Restraints
  • Check facility policy
  • Usually every two hours
    • Monitor and assess face to face
    • Mental and physical status
    • Breathing, circulation and overall wellbeing
    • Need for continued restraints
    • Therapeutic verbal communication

○ Nursing Care for Pts in Restraints
  • Every 2 hours or per hospital policy
    • Offer fluids, nourishment
    • Toilet
    • ROM
    • Circulation of restrained limb
    • Pulses, edema, capillary refill
    • Skin condition

○ RESTRAINTS DO NOT PREVENT FALLS OR INJURIES. RESEARCH SHOWS THAT CLIENTS INCUR LESS SEVERE INJURY WHEN LEFT UNRESTRAINED
  • Many long term care facilities aim at zero use of restraints
    • E.g. Mattress on floor

○ What is main reason pt’s climb over rails?

○ Side Rails
  • Maybe considered restraints when used to prevent pt from voluntarily getting out of bed
  • Have caused many injuries
  • Including asphyxiation
  • Bed in low position
  • Assess mental status, risk for falling out of bed, ability to get in and out of bed safely

○ Ambualarm
  • Device that senses pt’s body weight
    • Placed under pt in bed or sitting in chair
    • Alarm when pt lifts off weight
    • Learn the sound of the ambualarms used in your facility

• Risk for Falls
  • Falls account for up to 90% of hospital incidents
    • Hip fracture is one of the most serious complications

○ Risks
  • Older adult
  • History of previous falls
  • Mobility problems
  • Gait disturbances
  • Postural hypertension
  • Sensory disturbances
  • Urinary and bladder problems
  • Certain Medical conditions
    • Cancer, CV, neurological
    • Anemia
• Dehydration
  ▪ Drug use and drug interaction
  ▪ Poor nutrition

  o Fall Assessment Tools
    ▪ LCM Morse Fall Assessment Scale
    ▪ See Table 37-1, page 969

  o Interventions
    ▪ Increase water intake for postural hypotension
    ▪ Dangle at bed side – get up slowly
    ▪ Review medications
    ▪ Recommend pt used only one pharmacy
    ▪ Adequate nutrition
    ▪ Vision care
    ▪ Environmental control and safety
    ▪ Exercise to improve balance and strength
    ▪ May need side rails
    ▪ Non slip mats

• Seizures
  o Hyperexcitation of neurons in brain leading to sudden, violent involuntary series of contractions of a group of muscles.
    ▪ Prodomal phase
      ▪ Aura
    ▪ Ictus – usually lasting less than 2 minutes
      ▪ Generalized or localized
      ▪ Tonic
      ▪ Clonic
    ▪ Post Ictal phase

  o Seizure Precautions
    ▪ Side rails padded
    ▪ Bed in low position
    ▪ Take showers not baths
    ▪ Never swim alone
    ▪ No driving unless seizure free for a period specified by state

  o Interventions to prevent clients from injury
    ▪ Oral airway at bedside (prevent injury to tongue) for status epilepticus
    ▪ Suction and oral suction equipment at bedside
    ▪ Oxygen
    ▪ Rail Padding

  o When seizures occur
    ▪ Pt should be in bed or on floor
    ▪ Clear area of hazards, chairs etc
    ▪ Place in side lying position if possible
    ▪ Protect head by supporting with pillow
    ▪ Protect from injury
    ▪ Loosen clothing
    ▪ Nothing in mouth
    ▪ Provide privacy
    ▪ Observe timing and events of seizure
      ▪ LOC, duration, color, characteristics
    ▪ Reorient as needed

  o Status epilepticus
    ▪ Status epilepticus > 15 – 20 mins, client does not regain consciousness
    ▪ Medical emergency
- Insert oral airway between seizures when jaw relaxed if possible
- Do not put fingers into mouth
  - Monitor for side effects of anti seizure medication
    - E.g. Dilantin
      - Monitor blood levels
      - Toxic levels:
        - drowsy, lethargy, ataxia, confusion, sleep, visual disturbances

- Fire Extinguishers
  - A – Ordinary combustibles (wood, cloth, paper, plastics)
    - Soda and acid extinguisher
  - B – Flammable liquids (gasoline, grease, paint, anesthetic gases)
    - CO2 extinguisher
  - C – Electrical equipment
    - CO2 extinguisher
  - Procedures when fire discovered
    - Close all doors – why?
      - Fire doors will close automatically
    - Do not use elevators – why?
  - RACE
    - “R” rescue/remove those in immediate danger (lateral vs vertical evacuation)
    - “A” activate the alarm
      - Know facilities fire code
    - “C” confine by closing doors, windows, turn off equipment and oxygen
    - “E” Extinguish fire
  - PASS
    - “P” Pull pin to unlock handle
    - “A” Aim low at base of fire
    - “S” Squeeze the handle
    - “S” Sweep from side to side

- Priorities of evacuation
  - Clients in immediate danger moved first i.e. clients closest to fire
  - Those on O2 – O2 should be disconnected and moved
  - Ambulatory clients who can walk assist those in w/c
  - Non ambulatory clients

- If in fire, stop, drop and role