“IATROGENESIS: WHY OLDER PATIENTS ARE AT RISK DURING AN ACUTE ILLNESS”

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Objectives:

- Name three reasons older patients are at greater risk due to acute illness and hospitalization
- Discuss the role of decreased physiological reserve in aging as a risk factor for iatrogenesis

DISCLOSURE
Jan Dougherty, RN, MS does not have a significant financial interest or other relationship with manufacturer(s) of commercial product(s) and or provider(s) of commercial services discussed in the presentation.
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Iatrogenesis: Why older patients are at risk during acute illness

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Slide 2

What is iatrogenesis?

- Illness resulting from a diagnostic procedure or therapeutic intervention that is not a natural consequence of the patient's disease
- Common causes:
  - Medications
  - Diagnostic/therapeutic procedures
  - Nosocomial infections/conditions
  - Delirium, dehydration, malnutrition
  - Pressure ulcers, incontinence, fecal impaction
  - Environmental hazards
  - Provider values, beliefs and attitudes
  (Palmer, RM (2004), The Hospitalist, 4-7)

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What puts older patients at risk?

- Advanced age
- ↑ risk of hospitalization
- Diminished physiological reserve
- Atypical presentation of illness
- Multiple co-morbidities
- Functional and cognitive impairment
- Diminished muscle mass, strength, and aerobic capacity
- Postural instability
- Environmental barriers
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What are the results of iatrogenesis?

- Length of stay
- Mortality
- Up to 105,000 Medicare deaths/year
- Cost
- $2.85 billion annually
- It has been suggested that 70% of iatrogenesis could be prevented!

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Iatrogenesis: Medications

- Adverse Drug Events (ADE) are the most common cause.
- Majority of ADE due to inadequate drug monitoring or inappropriate dosing.
- Polypharmacy increases the risk of ADE.
- Normal age-related changes can exaggerate the effects of medications.

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Medications: Role of the Nurse

- Close monitoring of medications for potential ADE.
- Be alert for confusion and sedation.
- Clarify medications at admission and discharge.
- Care coordination is key.
- Don’t forget to ask about OTC medications.
- Utilize non-pharmacological methods for common issues:
  - Confusion
  - Anxiety
  - Incontinence
  - Sleep.
Iatrogenesis: Procedures

- Most procedures involve some degree of risk.
- Surgical complications in older patients
  - 50% of all surgical emergencies
  - 75% of all operative deaths.

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Procedures: Role of the Nurse

- Advocacy
  - Ensure that patient and/or medical decision maker understands the risks/benefits involved in any procedure.
- Heightened awareness and assessment following procedures.

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Iatrogenesis: Nosocomial Infection

- Affects up to 3 million patients/year.
- Nearly 1 of hospitalized older patients.
- Equal number of nursing home residents affected.
- Highest risk patients
  - Older patients with a history of infections.
  -Critically ill patients due to compromised immune system.
- Approximately 30% of all nosocomial infections are considered preventable.
- Most common infections include:
  - Respiratory
  - Urinary Tract
  - Skin
  - GI.
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**Nosocomial Infection: Role of the Nurse**

- Hand washing
- Patient and family education
- Continuous infection control surveillance

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**Nosocomial Conditions**

- Delirium
  - Up to 50% of older patients develop during hospitalization
- Deconditioning/functional decline
  - Up to 60% of hospitalized older patients at risk of functional loss/decline
  - Assisted/skilled facility
- Malnutrition and dehydration
  - ↑ of malnutrition during hospital stay
- Pressure ulcers
- Incontinence
  - Major causative factor leading to nursing home placement
- Depression
  - Estimated to affect up to 30% of patients in acute/LTC settings
- Fecal impaction

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**Nosocomial Conditions: Role of the Nurse**

- Delirium
  - Early recognition, nonpharmacological interventions, avoiding harmful medications
- Deconditioning/functional decline
  - Know baseline prior to illness; get the patient up and moving; utilize PT/OT; get home health following d/c
- Malnutrition/dehydration
  - Small frequent meals focus on comfort foods; offer fluids frequently; careful I&O; utilize the dietitian
- Incontinence
  - Avoid Foley catheters; bedside commodes; prompted voiding; encourage normal habits; get the patient up and moving
- Fecal impaction
  - Record BMs and intervene early; fluids
- Depression
  - Be aware of presence of depression; ask for a psychiatric consult
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Iatrogenesis:
Environmental Hazards
- Falls are the most common hazard
- 1.5 falls/hospital bed/year
- $1000/bed
- Restraints (including bed rails) can be hazardous
- Defective equipment

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Environmental Hazards:
Role of the Nurse
- Anticipation of need for movement
- Physical therapy
- Appropriate footwear
- Avoid excess clutter in room
- Surveillance of equipment

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Iatrogenesis: Values, Beliefs and Attitudes
- Health care providers can influence care based on own beliefs
  - Frailty
  - Dementia
- Older patients have their own values, beliefs and attitudes and may:
  - Underreport and deny symptoms
  - Be less assertive in seeking/reporting needs
Values, Belief and Attitudes: 
Role of the Nurse
- Examine your own belief system as it relates to patient care
- Be an advocate

Summary
- Nurses play an essential role in preventing iatrogenesis through increased recognition of untoward consequences

Helpful Resources
- Hartford Institute for Geriatric Nursing
  - www.hartfordign.org
- Nurses: Improve Healthcare Systems for Elders
  - www.nicheprogram.org