

## **Falls Prevention: A Review**

- Written by Hi-R-Ed Online University
- One (1) CE credit for nurses, case managers, social workers and registered dietitians



#### **A Few Reminders**

- All participants will be muted during the presentation.
- After the presentation has ended, if you have a question, please type it into the panel and the organizer will review questions at the end.
- If you are having any trouble dialing into the webinar, please hang up and dial back in.



#### **CE Certificates**

- All registered participants should have received an email with a link to the post-test from Hi-R-Ed Online, the accredited provider of today's CE course.
- In order for a CE certificate to be received, the test will need to be completed and passed.
- Please follow the instructions in the email that you receive.
- If you have more than one qualifying credential you are able to receive multiple certificates—for instance, a nurse case manager is eligible to receive both a nursing and a case management certificate for their participation. Please be sure to include your license number for each profession.
- Qualifying professions are: nurses, case managers, social workers, and registered dietitians.



### **Company Overview**

- Mediq
  - \$2.5 billion health care company
  - In business for over 105 years in the Netherlands
  - Operations in 14 countries
  - Over 7,100 employees

- Byram Healthcare
  - Founded in 1968
  - 750 employees
  - 14 customer service locations
  - 5 Distribution centers
  - 6 Centers of Excellence



### **Continence Care Program**

- Full-Service Incontinence and Urology Supplier
  - Offering a wide selection of high quality products delivered discreetly to the patient's home.
- Continence Care Education
  - Customized educational materials promote control and independence while enhancing quality of life.
  - Continence Care quarterly newsletter.
- Continence CareLines
  - Ongoing clinical and product support available to patients at any time.
- Customized Samples
  - Ensures the <u>proper fit</u> to maximize comfort and prevent skin breakdown.
- Easy Order Process
  - Phone, fax, or mail orders.
  - Online reordering at mybyramhealthcare.com



### Cindy Nissen, RN, MSN, CWCN

- Over fifteen years as an advanced practice nurse with clinical specialization in adult health and aging, and health promotion.
- Currently is the Course Author and Director of the Wound and Ostomy Care Section for Hi-R-Ed, Online University.
- Develops and reviews CE courses, journal clubs and conference reviews on subjects related to aging, medical/surgical nursing and wound, ostomy and continence care.



### **Learning Objectives**

- Upon completion of this course, the participant should be able to:
  - Describe two risk factors associated with falls
  - Describe 3 types of practical assessments for the risk of falls
  - Discuss nursing, physical or occupational or other rehab therapist's roles in the evaluation, prevention and treatment of falls



## **Background**

- Definitions vary widely
- A few statistics:
  - Fall-related deaths are on the rise
  - Falls are the most common cause of non-fatal injuries in >65 year olds
  - 1/3 of adults >65 years old fall
  - 1/2 of adults >80 years old fall
  - After first fall, more likely to fall again



## **Topics**

- Risk Factors
- Screening and Practical Assessment
- Intervention Options
  - Risk reduction and prevention
  - Treatment





# **Endogenous Risk Factors**

- Cardiovascular and neuromuscular
- Bone issues
- Cognitive and psychiatric conditions
- Medication side effects



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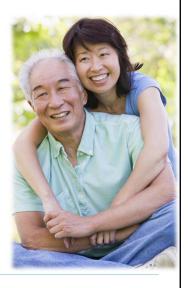
## **Endogenous Risk Factors**

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- Bone issues
- Cognitive and psychiatric conditions
- · Medication side effects



## **Exogenous Risk Factors**

- Medications: type and changes
- Appliances and devices
- Environmental hazards
- Others



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## **Consequences of Falls**

- Fatal injuries:
  - Brain, spine, legs, feet, hips, internal organs
  - More common in men
- Non-fatal
- injuries
  - Fractures more
  - common in
  - women



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## **Consequences of Falls**

- Costs
  - Emergency room treatment
  - Hospitalization and others



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### **Risk Assessment**

- Age >65 years
- Visual impairment
- Imbalance, unsteady gait, weakness, other mobility problems
- Disorientation and psychotropic medications, including polypharmacy
- Environmental hazards
- Reliance on assistive devices (crutches, cane, walker, etc)

### **Risk Assessment**

- · With history of falls:
  - Gait, balance, mobility issues
  - Osteoporosis, anemia
  - Capabilities and fear of falling
  - Impairments: visual, cognitive, urinary
  - Hazards in home or other setting





### **Practical Assessment**

- Subjective
- · Functional mobility and gait
- Musculoskeletal
- Movement strategies and sensory systems



## **Subjective Assessment**

- Patterns related to repeated falls
- Interview of patient or care giver
  - Circumstances of falls
  - Surroundings during falls
  - Medication changes before falls
  - Conditions prior to falls





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## **Mobility and Gait**

- Functional mobility tests
  - Sit to stand, reaching, turning, climbing stairs, retrieving item from the floor
- Functional gait tests
  - Activities of daily living tasks?
  - Time and distance tests?
  - Walking speed with balance tasks.





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### Musculoskeletal

- Strength
- Range of motion
- Pain
- Posture
- Tone



## **Sensory Systems**

- Background on sensory systems
  - Visual
  - Vestibular
  - Somatosensory: touch, proprioception
- Sensory disorganization
  - Disruptions in sensory input
  - Sensory weighting and compensation



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### **Interventions**

- Role of nurses and physical or occupational therapists
  - Nursing: medication, transfers, environmental hazards, incontinence
  - Physical/occupational therapy: gait and balance training, strengthening, assistive devices





## Communication

- Interdisciplinary communication
- Dividing responsibilities
- · Integrating other disciplines as necessary

### **Interventions**

- Prevention multifactorial is best
  - Physical exercise, training
  - Patient education
  - Devices
    - Assistive poles, grab bars
    - Walkers, canes, wheelchairs, scooters
    - Lifting/seating systems, ramps
    - Footwear, hip protectors/other devices



#### Intervention

- Treatment
  - Injury treatment
  - New prevention strategies
    - Education, training to correct problems related to recent falls
    - Implementation of new or additional emphasis on proper fitting and use of devices
  - General health improvement





## **Summary**

- Formal risk assessment
  - Checklists: fall history, diseases/conditions, medications and medication changes, visual impairment, assistive devices, fear of falling, environmental hazards
  - Physical: gait and balance
    - Function and mobility
    - Musculoskeletal
    - Somatosensory



### **Summary**

- Interventions
  - Treat fall-related injuries
  - Develop strategies to prevent recurrence
  - Initiate multifactorial program for risk reduction:
    - Education
    - Exercise
    - · Medical management
    - Assistive devices
    - Others



#### **CE Certificates & Post Test**

- In order for a CE Certificate to be received, the test will need to be completed after today's webinar.
- http://www.hi-r-ed.com/webinar072116/lead-in.htm
- Any issues, please email: <u>comments@hi-r-ed.org</u>
- If you have more than one qualifying credential you are able to receive multiple certificates. Please be sure to include your license number for each profession.
- Qualifying professions are nurses, case managers, social workers, and registered dietitians.



## **Thank You!**