FUNCTIONAL ASSESSMENT OF THE FRAIL ELDERLY

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Objectives

1. Differentiate between physical and functional assessment tools used in elderly chronic disease populations

2. Apply selective tools to functional assessment in the elderly chronic kidney disease population
I live the elderly care dream!
Physical versus functional

- Blood pressure
- Heart rate
- Eye exam
- Hearing exam
- Skin integrity

- Obtaining food
- Dressing
- Walking
- Carrying items
- Writing
Why function?

- 1.6 million adults with hip fracture
- 25% mortality
- 50% complete recovery

- 2.6 million in 2025
- 4.5 million in 2050
- Risk of “functional” recovery is poor in ESRD

The “real” function questions

- If you fell on the floor, could you get up?
- Can you tie your shoes?
- Can you carry items (food, laundry)?
- Can you open pill containers?
- Can you walk without a cane or walker? (safely)
- Can you walk on uneven surfaces?
- How far can you walk (how far do you need to walk?)
Key points

- Multidimensional assessment required
- Assessments are on-going, not static
- Match “need to do” with “how to do”
- Focus on evolvement of aging and function process
## Multidimensional Assessment

<table>
<thead>
<tr>
<th>Research Domains</th>
<th>Practical Domains</th>
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<tbody>
<tr>
<td>Physical</td>
<td>Objective/measurable</td>
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<tr>
<td>Psychological</td>
<td>Subjective/observational</td>
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<tr>
<td>Social</td>
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Multidimensional assessment

- **Measure**
  - Q of L scales
  - Hand grip strength
  - Walking gait
  - Body mass index
  - Bioelectric impedance
  - Hydration
  - Dietary intake

- **Observe**
  - State of dress
  - Condition of shoes
  - Stamina
  - Communication
  - Memory
  - Make-up (women)
  - Wallets/purses/bags
  - Food stories
Function = Food intake

- Access to food that is safe and consistent
- Ability to prepare, shop, consume
- Lab values (albumin, phosphorus) correlated
- Cognition and hydration
- Adequacy of nutrients
- Dental and oral health
Body weight

- Weight loss in ESRD elderly correlated to loss of muscle mass
- Baseline obesity may “cushion” and reduce weight loss risk
- Stable weight correlated with little or no effect on mortality over time
- Challenge:
  - Accurate and consistent estimation of body weight
  - Accurate estimation of body composition muscle versus fat stores
Where do they live?

**Community/own home**
- Higher level of functional risk
- Potential higher risk of adverse outcomes if live alone
- Greater risk of falls in the home without preventive initiatives

**Assisted/independent living**
- Higher level of frailty risk
- Potential lower risk of adverse outcomes due to existing access to healthcare personnel
Using Assessment Tools

- Changes between administration WITHIN person are important
- Resist comparison BETWEEN individuals
- Challenge:
  - Find a tool that works for your needs
  - Create a cycle of evaluation and documentation
    - Administer/Repeat
    - Compare with prior measures
    - Assess function or risk change
    - Suggest modifications
    - Evaluate impact
Selecting Assessment Tools

- Kidney Disease Quality of Life Short Form 1.3
- Montreal Cognitive Assessment
- Mini-Mental State Examination
- Geriatric Depression Scale

- Subjective Global Assessment
- Malnutrition Inflammation Score
- Geriatric Nutritional Risk Index
- Hemodialysis Prognostic Nutrition Index

- ----and many more
Summary

1. A wide array of functional assessment tools can be used in elderly chronic disease populations

2. A cohort of selective tools to aid in functional assessment have been applied to the elderly chronic kidney disease population

3. Use creativity and repetitive assessment to evaluate and address functional changes to promote quality of life and decreased risk for adverse health events
Happy Functional Aging!

Find me aging at: jbeto@luc.edu