Using Assessment Results To Create Falls Prevention Exercise Programs

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Three Take Away Points

1. Attendees will learn why packaged falls prevention exercise programs have hit-or-miss results with patients/clients.

2. Attendees will learn how to evaluate clients/patients on three validated functional assessments of older adults. This evaluation will include both objective scoring and observation of movement quality.

3. Attendees will be given a Falls Prevention Program matrix to develop individualized falls prevention exercise programs from assessment results.

I. Setting the Table
   A. Three questions for the audience
      1. Who?
      2. What?
      3. How?
   B. Objectives for session

II. Introduction To The Problem
   A. Falls occurrence
      1. Frequency
      2. Medical consequences
      3. Health care costs
      4. Quality of life limitations
   B. Risk factors for falls
      1. Intrinsic & Extrinsic factors
      2. Why older adults are at elevated risk
   C. Evidence of exercise intervention effectiveness
      1. Studies that support exercise as an intervention strategy
2. Studies that do not support exercise as an intervention strategy
3. WHY DO RESULTS DIFFER SO OFTEN?

III. Individualizing A Falls Prevention Exercise Program
A. General strategy
   1. Utilize validated assessments
   2. Use objective score to determine norm-based functional level
   3. Use movement observations to determine relative strengths/weaknesses
   4. Combine to develop appropriate exercise program design
B. Objective scoring of assessment performance
   1. Functional Reach Test
   2. Timed Up-And-Go Test
   3. 30-second Chair Stand Test
   4. Norm-based scoring of individual clients/patients
C. Movement observation of assessment performance
   1. Comparison of two participants performing Timed Up-And-Go Test
   2. Basic motor control principle - developing list of task demands
   3. Functional Reach Test
   4. Timed Up-And-Go Test
   5. 30-second Chair Stand Test

IV. Translating Assessment Results To Program Design Components
A. Four domains of falls prevention exercise programs
   1. Joint mobility
   2. Sensory integration
   3. Muscle strength/muscle power
   4. Dynamic balance/gait enhancement
B. Falls Prevention Program matrix
C. Norm-based objective scores
   1. Determines starting level of difficulty in the FPP matrix
   2. Start with “Lowest Common Denominator” approach
D. Movement observations
   1. Determines selection of specific exercises in the FPP matrix
   2. Relative # of exercises for each domain
   3. Development of a truly individualized falls prevention exercise program

V. Sample Program Design Matrix With Specific Exercises
A. Participant #1
   1. Review of objective score and movement assessment
   2. Joint mobility exercise selection
   3. Muscle strength/muscle power exercise selection
   4. Dynamic balance/gait enhancement exercise selection
B. Participant #2
   1. Review of objective score and movement assessment
   2. Joint mobility exercise selection
   3. Muscle strength/muscle power exercise selection
   4. Dynamic balance/gait enhancement exercise selection

VI. Questions & Comments