Assessing the Environment for Fall Prevention

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Overview of Environmental Assessment

- Risk factors in the environment
- Person-Environment Interaction
- Types of Assessments
- Sample Tools
- Challenges & Suggestions
Extrinsic Risk Factors

- Presence of hazards:
  - Clutter, cords in pathway
  - Loose carpet, slippery surfaces
  - Unstable furniture
  - Pets

- Absence of supports:
  - Lack of places to rest or to support the body (e.g. chairs, handrails, grab bars)
  - Lack of adequate lighting
Other Extrinsic Factors

- Medication management
- Footwear/hip protectors
- Lighting
- Mobility devices
Ecological Model

(Weak, Low) to (Strong, High)

Ecological Model (Lawton & Nahemow, 1973)

- Positive Affect
- Adaptive Behavior
- Marginally adaptive behavior
- Marginally adaptive behavior
- Negative affect or maladaptive behavior
- Negative affect or maladaptive behavior

Competency

Environmental Press
Types of Assessments

- Self-report/Checklist of Safety
- Performance
- Skilled Analysis of Supportive Features

(Anemaet et al., 1999)
Home Safety Checklists--Examples

- Rebuilding Together --Checklist
- CDC Home Safety Checklist
Home Safety Checklists -- Advantages

- Can be self-report
- Often include recommendations
- Offers quick screening of safety hazards
Home Safety Checklists – Disadvantages

- Few have demonstrated reliability/validity studies
- Focus on hazards, rather than the use of the environment
Examples of Performance Measures

- Get up and Go
  - (Mathias et al., 1986; Podsiadlo D, Richardson S, 1991)

- Tinetti Balance Scale
  - (Tinetti, 2000)
Performance Measures—Advantages

- Demonstrate ability to move
- Often have established reliability/validity studies
Performance Measures—Disadvantages

- May not specifically recognize the environment
- Often requires skilled professionals to administer
Skilled Analysis

- Skilled interview and observation

- Enabler www.enabler.nu
  - (Iwarsson & Isacsson, 1996)
Skilled Analysis—Advantages

- May address the interaction of performance in the environment
- More comprehensive
- Can lead to tailored environmental interventions to prevent falls
Disadvantage

- Often requires skilled professionals to administer
- Can be more time consuming
- May need a team approach with assessment results from a variety of professionals
Identify Potential Environmental Hazards

- Different height steps
- Walker not opened
- Only one handrail
- Hose in the way
- Dog and leash
- Position of caregiver in relation to older adult
- Secured mats?
- Type of Shoes?
Challenges to Environmental Assessment in Fall Prevention

- HM and home hazards are defined broadly
- Environment can be assessed in isolation of how it is used to complete everyday activities
- Need to address the Person-Environment interaction
Environmental Assessment in Fall Prevention should include:

- Reliable and Valid Measures

- Comprehensive Assessment
  - Person’s abilities and
  - How the person uses the environment to complete activities

- Team Approach to assessment
  - Professional, skilled assessors
  - Client perspective
Person-Environment Conceptual Model
3 Major Problem Areas of the Home:

- Outside Steps To The Entrance
- Inside Stairs To A Second Floor
- Unsafe Bathrooms

Source: HUD (2001)