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Aging Programming: Evidence-Based Strategies for Aging in Place

Pamela E. Toto, PhD, OTR/L, BCG, FAOTA

Objectives

- 1) Describe three intervention approaches for reducing disability and promoting aging in place in older adults
- 2) Identify three evidence-based strategies that are effective for promoting aging in place for older adults
- 3) List opportunities for integrating best practice strategies to promote aging in place across practice settings
What is AGING IN PLACE?

“The ability to live in one’s own home & community independently, safely, & comfortably, regardless of age, income, or ability level” (CDC, 2013)

87%

First Steps

- What does your client….
  - Want to do?
  - Need to do?
  - Is expected to do?
- …to Age in Place

Variety of Methods

- Self-report vs. Performance
- Interview vs. Standardized Assessment
  - Canadian Occupational Performance Measure (COPM)
  - Activity Card Sort (ACS)
  - Performance Assessment of Self-Care Skills (PASS)
  - In-Home Occupational Performance Assessment (I-HOPE)
Intervention

A variety of intervention approaches can be used to help older adults age in place.

- Restore (i.e. restoration, remediation)
- Modify (i.e. compensation, adaptation)
- Prevent Disability
- Promote health

AOTA, Occupational Therapy Practice Framework (OTPF III)

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Restore

Change the client (i.e. person) to regain a skill or ability that has become impaired

- Can be *impairment-focused* or *occupation-focused*

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(OTPF III)
**Restore**

- Strong evidence exists that under the right circumstances, older adults can reduce some impairments
- Older adults with chronic condition may have less potential to reduce impairment
- Requires motivation, and sufficient time/intensity*

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**Case Example: Restorative**

Last winter, Mrs. R (85) acquired a bad cold that turned into pneumonia. She was hospitalized for 4 days and then sent home with home health services. At baseline, Mrs. R demonstrated decreased strength and required minimum assistance with self-care. Five weeks later and after occupational therapy 3 days per week plus a home program, Mrs. R regained her strength and endurance to become independent in self-care….doing activities the same way she did them before she got pneumonia.
**Modify**

Change the environment and/or activity demands to enable performance of a desired occupation

- Compensation; Adaptation
- Occupation-based

**Modify**

Selected when…

- Impairment is considered permanent
- Impairment is not expected to improve
- There is limited access and/or time for restorative approach

- Strong evidence that this approach with older adults can reduce ADL/IADL disability
- Still may require time and resources to implement changes
- Approach may be dependent on “new learning”
Compensation and Adaptation: Interchangeable or Distinct?

- Interchangeable in most occupational therapy literature
  - OTPF III
  - Willard & Spackman (12th edition)
- May be each used as a distinct approach in certain practice settings or with certain populations
  - Compensate – New learning by client
  - Adaptation – Environment change

Case Example: Modify

Mr. B (71) chain-smoked for 45 years and now has severe COPD. He is on oxygen, however, his shortness of breath is limiting his ability to prepare his own meals and complete his laundry (which is in the basement). The occupational therapist suggests Mr. B use a stool while preparing meals at the kitchen counter and washing dishes at the sink (a compensatory strategy) to reduce effort for the task. For laundry, the occupational therapist suggested use of a laundry bag (compensatory) to reduce effort transporting items up and down the stairs or to consider purchase of an apartment sized washer/dryer for the main floor (adaptation).
Prevent

Educate older adults on strategies to reduce likelihood of difficulty in ADL/IADL

- May include restorative, compensatory, adaptive features
- Ex. Remove clutter and increase lighting in the home to reduce fall risk.

Approach associated with older adults who are at high risk for decline

- Secondary Prevention
- Previously a “taboo” word (reimbursement)
- Difficult to “sell” (“If it ain’t broke, don’t fix it”)

Case Example: Prevent

Ms. Y (69) is a woman who is a morbidly obese with a primary diagnosis of type II diabetes. Despite living alone and being independent, she admits to difficulty with lower body bathing secondary to her weight. The occupational therapist educates Ms. Y on the importance of hygiene and foot care, especially for someone with diabetes to prevent foot ulcers. The occupational therapist introduces LB bathing equipment and teaches Ms. Y how to use an extended foot mirror as preventative measures.
Health Promotion

- Educate well older adults who do not have a disability or are at low risk for disability on strategies to maximize life participation
- Typically focused on preventing impairment but can focus on occupation
- History of limited application for older adults
  - Reimbursement
  - Few older adults without disability or risk
  - Addressed by other professionals

Case Example: Promote

Mr. H (70) is a healthy older man who recently retired from his 30 year career as a gardener for Disneyland. Because his job was naturally active, he never pursued exercise or other physically active tasks for leisure. Now, he is unsure how to stay healthy. The occupational profile reveals that Mr. H likes being outdoors and enjoys being with people. The occupational therapist educates Mr. H on necessary strategies to remain healthy and recommends the local senior center’s walking club and men’s bocce league as options for maintaining health.
Which Approach?

RESTORE

MODIFY

PREVENT

PROMOTE

CLINICAL REASONING

EBP: Falls Prevention

Impact
- Reason for 40% of SNF admissions
- 50% who sustain hip fractures are unable to return home or live independently after their injury
- Most common cause of TBI

Cause
- Physical Risk Factors
- Environmental Risk Factors
- Behavioral Risk Factors
Interventions for fall prevention can be complex

• Can be delivered 1:1 as skilled rehabilitation or through community fall prevention programs

• Limited evidence for single component interventions
  • Home modifications
  • Exercise

• Growing evidence
  • Multicomponent interventions
  • Individualized interventions

Skilled OT Intervention

Goal: Maintain or increase engagement in occupation while reducing incidence/risk for falls

1. Increase client awareness of falls risk
2. Restore* and/or compensate for mobility and balance
3. Improve accessibility and safety of environment
4. Increase client self-efficacy
   Reduce fear of falling

Limited evidence that improving strength = improved ADL/IADL and decreased falls (Sherrington et al. 2008)
Home Modifications

Evidence suggests that home modifications alone are not sufficient for reducing falls in older adults

- Occupational therapy intervention that addresses the person/environment/occupation has strong evidence for reducing falls risk
- Common environmental modifications
- Commonly prescribed assistive devices

EBP: Cognitive Impairment

Critical factor influencing an older adult’s ability to age-in-place.

- ADL/IADL independence and adequacy
- Safety
  - Communication
  - Behavior
  - Caregiver burden
Mild Cognitive Impairment (MCI)

- Memory loss that falls outside the normal limits for one’s age group
- Can affect memory and/or thinking skills but does not impair ADL/IADL independence*
- Is a “clinical” diagnosis (i.e. no test to determine)
- Associated with higher risk of developing dementia or Alzheimer’s disease

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Skilled OT Intervention

*Goal: Maintain engagement in occupation while reducing safety risk*

**Modify**
- Simplify the task
- Make and follow routines
- Use tools and devices
- Anchor new material to familiar material
- Get rid of distractions
- “Teach back”

**Questions to Consider:**
1. Is adequacy truly a problem?
   - Process
   - Quality
2. Can you identify a solution?
   - Continue task with modification
   - Eliminate task
Context: Caregivers

Cultural, Social, Personal Contextual Considerations

- Cultural beliefs regarding caregiver may influence decisions
- Caregiver relationship/role with dependent is changed
  - Mother/daughter vs. Caregiver/dependent
- Expectations of person with cognitive impairment based on past history may persist
  - Ex. Husband did all the finances but is no longer capable
- Caregiver may have limited education for understanding nature of condition and expected progression

EBP: Frailty

<table>
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<th>Facts</th>
<th>Impact</th>
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| • Increased vulnerability in which minimal stress can cause functional impairment  
  • A clinical syndrome  
  • Not disability  
• Age-related and disease-related changes  
• Potentially reversible | • Increases risk for adverse events  
• Is expensive  
  • 50% of acute care services  
  • 80% of home and community-based services  
  • 90% of residents in SNFs |
Skilled OT Intervention

Research primarily focused on exercise (restorative approach)
- Effective in reducing frailty
- Limited effect on reducing disability
- Limited effect on reducing adverse outcomes

Recommendation
- Primary Focus: Compensation/Adaptation to reduce disability
- Secondary Focus: Exercise and physical activity interventions to reduce frailty

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Case Example

- Mrs. M (85) lives alone in a suburban senior apartment.
  - History of injurious and non-injurious falls (ex. wrist fracture)
  - Recent errors with medication and money management (noticed by son)
  - Weight loss of 10 pounds in last 3 months*
  - Stopped going to church and bingo (“too tired”)*
  - No longer using the shower (too hard to enter/exit)*

- What is the role of occupational therapy?
- What are the priorities to address?
- Which intervention approach is best?
Application to Practice

- All occupational therapy practitioners can and should address aging in place regardless of setting
  - Acute Care
  - Post-Acute Care
  - Primary Care
- Area of focus should be influenced by options for next level of care
- Intervention approach should be influenced by context and environment (based on evidence)

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Application to Practice

**Acute Care**
- Determine prior living status and needs
- Identify strengths/limitations
- Modify
- D/C recommendation

**Post-Acute Care (inpatient)**
- Affirm living status and needs
- Address needs
  - “Do For” and “Do For Self”
- Restore/Modify
- Caregiver education

**Post-Acute Care (community)**
- Confirm needs*
- Address needs
- Primary-Modify
- Secondary- Restore/Prevent
- Caregiver education

**Primary Care (community)**
- Determine living status and needs
- Identify strengths/limitations
- Address needs
  - Prevent/Modify
- Community recommendations
Next Steps

- Ask the right questions – what does your client need to do to age in place?
  - Consider falls, cognition and frailty as key risks
- Prioritize occupations
- Determine “best” intervention approach for setting and resources (yours and theirs!)
- Implement your intervention plan
- Reassess/adjust often and consciously
- Work with team (across profession and setting)

Questions?
Thank You
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References

### Aging in Place Virtual Conference

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<td>Kelly Dickson CScD, OTR/L</td>
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<td>Person: Who are we Helping to Age in Place</td>
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<td>Environment: Where and How Do We Promote Aging in Place</td>
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<td>Occupation: What Interventions Do We Target to Promote Aging in Place</td>
<td>Christine Daeschner, OTR/L</td>
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