Interprofessional Assessment of BADLs and IADLs with Older Adults

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Case Scenario:

Henry was a retired 75-year-old man who was a bachelor living in rural Midwest area. His son noticed a general decline in Henry's well-being, such as long, ungroomed beard, dirty fingernails, foul odor, dirty dishes throughout the house, and a pile of bills that seemed to be unopened. Henry was not driving into town as much as he had done previously. He did manage to drive to his annual MD appointment with his primary care physician (PCP), who noticed the lack of self-care. His vital signs, assessment, and lab tests showed no concerning active disease process. What would be some good actions for the PCP to take?

Survey Question:

How many times in this past year have you seen a similar case scenario of self-care neglect?

- 0
- 1-5
- 6-10
- More than 10

4 Ms

- What Matters
- Mentation
- Medication
- Mobility

Of the 4 Ms, which ones are indicated in this scenario?

Objectives: Participants will…

- Utilize a bank of evidence-based assessments for functional performance in BADLs
- Identify evidence-based assessments for IADLs
- Implement therapeutic communication during assessment to support collaboration and trust with older adults.

Differentiation

BADLs

- Dressing
- Hygiene
- Grooming
- brushing teeth
- Transfers
- bed mobility
- toileting

IADLs

- Cooking
- home cleaning
- Laundry
- Driving & Community Mobility
- Paying bills
- Home maintenance
- Attending medical apts

Overarching Statement of Need:

There is a need for skill development of healthcare providers in interprofessional (IP) teams to assess basic activities of daily living (ADLs) and instrumental activities of daily living (IADLs) with therapeutic communication.

Needs: Self-Care Neglect [self-care neglect phenomenon]

Rachey & Janssen (2021)

- Definition: Refusal or inability to care and protect oneself in areas of food, water, clothing, personal hygiene, medication, home living environments, and safety measures (Dong, 2017).
- Approximately 1.2 million cases reported of self-neglect in older adults/year in US (O'Brien (2011)
- Self-neglect can be difficult to treat because many who have this condition will decline health care services that can enhance self-care (Reyes-Ortiz et al., 2014). ***What is the reason for this?***

Contributing Factors to Self-Care Neglect

- Decrease in executive functioning (Dong et al., 2010)
- Increased levels of reported pain (Pickens et al., 2006)
- Increased rates of depression (Burnett et al., 2006)
- Increased morbidity and mortality (Naik et al., 2008a)
- Increased hospitalization rates (Dong et al., 2012).

Needs: IADLs

- Low financial status, limited social support, unsafe living conditions, and hoarding behavior are signs of self-care neglect (Dong, 2017)
- Self-care neglect leads to poor nutritional status (Laniel, 2015). Difficulty making healthy meals limits nutritional intake.

Barriers to Addressing Self-Care Neglect (Dong 2017)

- Inefficient knowledge and awareness of self-neglect
- Limited resources and training supports for medical personnel
- Inefficient evidence of risk factors
- Absence of a reliable, valid, and culturally sensitive assessment tool for self-neglect.

Needs for Assessment

- Many older adults decline services to address self-care neglect because they are afraid someone will try to “put them in a nursing home”.

- This is problematic because there could be hazardous situations that could be remedied with simple adaptations (e.g. tub bench to sit down and swing legs over edge of tub rather than stepping over).

Statement of Need

- There is a need for interprofessional assessment of ADL and IADL functional performance in order to adequately address ***aging in place*** needs of older adults.

- *This information can also transfer to skilled nursing facilities, but this accounts for only 5% of the older adult population

Assessments: Process

- Social and medical histories
- Client's motivations and self-perceptions
- Home evaluation
- Functional capacity through physical, mental, and cognitive assessments

Braye, Orr, and Preston-Shoot. (2011).

Assessment: Process

- Therapeutic Questioning helps them feel heard and understood, which makes them trust provider
  - Start with “How” or “What” or “I’d like to know more about. What can you tell me about…?”
  - Paraphrase: restate what they said
  - Reflection: identify feeling behind what they said
    - “So it sounds like you feel frustrated with…Is that correct?”

Assessment: Process

- Never, ever, ever ask “Why” because it raises defenses, which will lead older adult to decline services altogether

Henry: Type in Chat Box

- Henry was a retired 75-year-old man who was a bachelor living in rural Midwest area. His son noticed a general decline in Henry's well-being, such as long, ungroomed beard, dirty fingernails, foul odor, dirty dishes throughout the house, and a pile of bills that seemed to be unopened. Henry was not driving into town as much as he had done previously. He did manage to drive to his annual MD appointment with his primary care physician (PCP), who noticed the lack of self-care. His vital signs, assessment, and lab tests showed no concerning active disease process.
- Create 3 questions the PCP can ask Henry that start with How or What?

Henry

- The PCP asked Henry
  - Henry, I'm concerned about you feeling isolated out in the the country and how that might affect your emotional well-being. How would you describe your feelings?
    - Henry described a typical day and said sadly that he felt lonely
  - The PCP said, "Loneliness can make a person feel sad."
    - Henry said, "It sure does."

Henry

- The PCP then asked Henry what his goal was
  - Henry said, “I used to want to stay in my home until I die but now I’m thinking that might be a lonely way to live, now that I don’t feel comfortable driving anymore. And now that I don’t get around much, I can’t get around much. Seems like I’m getting weaker. I kind of wonder if I would get better if I moved to town where there is more to do”
- The PCP said “So it sounds like you might want to move to town?” Henry nodded and said “But not to a nursing home! I want my own place”. The PCP said “How would you like it if I lined up some healthcare people who can help you with the planning a move and support you at home until you can make that change?” Henry agreed

Henry

- The PCP made referrals to the following people for home health:
  - Nursing for assessment of medication management and bathing assistance
  - Social work for information about senior living facilities and community resources to support the move
  - PT for assessment of mobility, balance, strength
  - OT for BADL/IADL assessment & training with assistive devices and driving and community mobility assessment

Henry

- The PCP added, “These people are here to help you meet YOUR goal. If you want to live in a senior apartment complex or your own home in town, they will help you do that.”

Types of Assessments

Performance Observation

Self-Report

Caregiver Report

Assessments

- Much of the information presented here is also consolidated in a very useful book
  - Bortnick (2017)

Comprehensive Assessments

Process for Home Assessment

- Problem: Many people will decline the invitation to do a home evaluation with them because they are afraid the evaluator will "put them in a nursing home"
- Solution: Collaborative Communication
  - What is your goal?
    - Many will indicate they want to go home or stay in their home as long as possible
  - "If going home is your goal, then I am the person who will help you get there and will help you stay there as long as you want"
    - Instant trust
  - "We typically do this by doing a home visit with you before your actual discharge from here so that we can suggest ideas that will make things easier and safer for you."

Process for Home Assessment

- *Environment* (each room)
- Actual *client performance* of BADLs and IADLs they typically do in each room
- Integrate collaborative intervention ideas
  - Demonstration
  - Ask permission to move things
  - Try out assistive devices (e.g. tub bench)

IP Team: One facility would not discharge residents until a home eval was completed and delivered to the county nursing team

Comprehensive Assessment: Perf Obs.

Performance Assessment of Self-care Skills [PASS](Rogers, Holm, & Chisholm, 2022)

- High and reliability
- Geared toward occupational therapy; however, other professionals may utilize
- 4 domains with 26 core tasks
  - 5 Functional mobility tasks
  - 3 BADL tasks
  - 4 IADL tasks with physical emphasis
  - 14 IADL tasks with cognitive emphasis
- Copyrighted but may access after completing a brief survey: https://www.shrs.pitt.edu/performance-assessment-self-care-skills-pass

Comprehensive Assessment: Self-Report

- Tinetti Falls Efficacy Scale [FES](Tinetti, Richman, & Powell, 1990)
  - Standardized questionnaire
  - Quantifies client's fear of falling by measuring confidence in performance of 10 BADLs & IADLs on scale 1-10 (1 is most confident)
  - Advantages:
    - <10 min; Free for clinical practice; Contact creators or publisher for use in research or publication
  - Disadvantages
    - Poor validity; Difficulty separating confidence from actual performance

Comprehensive Assessment: Pt or Caregiver Report

- ADL Questionnaire [ADLQ](Johnson, Barion, Rademaker, Rehkemper, & Weintrasub, 2004):
  - For people with neurocognitive disorders
  - 28 items for BADLs & IADLs (spectrum of self-care, household maintenance, employment/recreation, shopping/money, travel, communication)
  - Patient/client self-report or caregiver report
  - Advantages: Fast and easy, no special training, applicable across settings, good tracking for functional changes over time
  - Disadvantages: subjective, some irrelevant or redundant items

Basic ADL Assessments

BADL Assessments: Perf Obs

- Functional Independence Measure [FIM](Keith, Granger, Hamilton, & Sherwin, 1987)
  - 18 items in 4 ADL areas:
    - Self-care: eating, grooming, upper and lower body dressing, toileting
    - Mobility: Transfers to/from bed, chair, w/c; toilet; shower
    - Locomotion: walk, w/c; stairs
    - Communication: comprehension, expression, social cognition, interaction, problem solving, memory
  - Scoring range: 0 (no activity) – 7 (independent)
    - Measures amount of assistant needed: no activity, total, max, mod, min, supervision or setup, modified independence (with assistive device), independent
  - Widely recognized in rehab settings

BADL Assessments: Perf Obs

- Functional Independence Measure [FIM](Keith, Granger, Hamilton, & Sherwin, 1987)
- Interactive observation of performance
  - Developed by Uniform Data System for Medical Rehab with software database
  - Multiple disciplines represented in tasks: OT, PT, SLP, Nursing, SW, Psychology, MD, etc

BADL Assessments: Perf. Obs

- Katz Index of Independence in ADLs (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963)
  - Interprofessional tool
  - Quantifies 6 BADL performance in hierarchy (feeding, continence, transfers, toileting, dressing, & bathing)
    - A = independent all BADLs
    - B = independent all but 1
    - C = independent all but bathing and 1 other
    - D = independent all but bathing, dressing, and 1 other
    - E = Ind all but bathing, dressing, toileting, and 1 other
    - F = independent all but bathing, dressing, toileting, transferring, and 1 other
    - G = Dependent in all 6
    - Other

BDL Assessment: Perf Obs.

- Katz (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963)
  - Advantages: Extensive research with high inter-rater reliability, validity, consistency little to no training
  - Disadvantages: Floor/ceiling effect
  - Access: Public Domain and readily available
    - Copyright Clearance Center (for permission for research or publication contact original journal in reference list)

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BADL Assessments: Perf Obs

- Barthel Index [BI] (Mahoney & Barthel, 1965): "Gold Standard"
- 10 ADL items: feeding, bathing, grooming, dressing, B & B, toileting, transferring, mobility, use of stairs
- Advantages:
  - Extensive research
  - Good IP tool
  - Excellent inter-rater reliability (Duffy, Gajree, Langhorne, Stott, & Quinn, 2013; Lowewen & Anderson, 1988)
  - Sensitivity to detect changes

Interfacing with GG Codes

- Use data from the prior assessments to inform GG Codes
  - 06 Independent
  - 05 Setup
  - 04 Supervision/touching assist
  - 03 Partial/moderate assist
  - 02 Substantial/max assist
  - 01 Dependent

Instrumental ADL Assessments

IADL Assessment: pt or caregiver report

- Lawton IADL Scale (Lawton & Brody, 1969)
  - 8-item, 10-min questionnaire: telephone, shopping, food prep, housekeeping, laundry, transportation, medication, finances
  - 2 pt rating for each item
  - Advantages: extensive evidence supporting reliability, predictive ability (e.g. cognition, falls), efficient
  - Disadvantage: Lack of sensitivity

IADL Assessment: Community Mobility

- Important Destinations: store, medical apts, senior citizens center, church, friends/family
- Driving assessments
- Public Transportation assessment
- Ability to access senior driving services
- Affordability of community mobility services

- IP Team: SW, OT, PT, PCP, Nursing, Dietician, Behavioral Health

Return to Case Scenario: Breakout room

Because of the PCP's therapeutic communication, Henry agreed to the assessments conducted in his home.
His son helped Henry find a small, one-story condominium for those who are 50 and older.

From the assessments we covered, which ones would be most appropriate for Henry? Name the professionals who could do each one?

Case Assessment Results

- Henry had weakness that made him feel unsafe to transfer into his tub. Nursing helped him bath until he was able to get stronger and more stable with PT and use the tub bench safely with OT by sitting on it first and then swing his legs over into the tub. He could stand safely by using the new grab rail and gripper mat on the bottom of the tub. He also started dressing while sitting in a chair with arms. Dietary, PT, and OT worked with him on healthy cooking and safe kitchen mobility techniques that helped him transport items while using a walker with a tray on it.

Case Outcomes

- Henry's son moved Henry to his new condo.
- As he got stronger, he was able to do longer-distance walking with a cane. SW helped him access meals on wheels, senior rider services, and life alert. The OT driving evaluation found his reaction time was too slow for safe driving so the OT worked with him on learning bus routes, transferring in/out of the bus so he could use both community mobility services.

Final Case Results

- Henry was eating better, which improved his cognition that enabled him to manage his own medication again. Home nursing was discontinued
- He was safely able to walk long distances so PT was discontinued
- He become independent in bathing, hygiene, grooming, and light meal preparation so OT was discontinued
- He began going to a senior fitness program that also offered community outings & coffee gatherings
- At his next annual wellness assessment with his PCP, Henry stated was really enjoying life again and he was clean, shaven, and smiling.

*Of the 4 Ms, which ones were addressed in this case?

Summary

Utilizing a bank of evidence-based assessments for functional performance in BADLs supports independence in self-care

Identifying evidence-based assessments for IADLs promotes aging in place

Effectively implementing therapeutic communication during assessment supports collaboration and trust with older adults.

References

- Bortnick, K., (2017). Occupational therapy assessments for older adults: 100 instruments for measuring occupational performance. SLACK, Inc.
- Braye, S., Orr, D., & Preston-Shoot, M. (2011). Conceptualising and responding to self-neglect: The challenges for adult safeguarding. Journal of Adult Protection, 13, 182–193. https://doi.org/10.1108/14668201111177905
- Burnett, J., Coverdale, J. H., Pickens, S., & Dyer, C. B. (2006). What is the association between self-neglect, depressive symptoms, and untreated medical conditions? *Journal of Elder Abuse & Neglect, 18*, 25–34. https://doi.org/10.1300/J084v18n04_04
- Dong, X., Simon, M., Wilson, R., Mendes de Leon, C., Rajan, B., & Evans, D. (2010). Decline in cognitive function and risk of elder self-neglect: Finding from the Chicago Health Aging Project. *Journal of the American Geriatrics Society, 58*, 2292–2299
- Duffy, L., Gajree, S., Langhorne, P., Stott, D., & Quinn, T. (2013). Reliability (inter—rater agreement) of the Barthel Index for Assessment of stroke survivors systematic review and meta-analysis. *Stroke, 44*, 462-568.
- Johnson, N. Barion, A., Rademaker, A., Rehkemper, G., & Weintrasub, S. (2004). The activities of daily living questionnaire: A validation study in patients with dementia. *Alzheimer Disease and Associated Disorders, 18(4*), 223-230.

References

- Katz, S., Ford, A. B., Moskowitz, R. W., Jackson, B. A., & Jaffe, M. W. (1963). Studies of illness in the aged. The index of ADL: A standardized measure of biological and psychosocial function. *JAMA, 185*, 914-919.
- Keith, R., Granger, C., Hamilton, B., & Sherwin, F. (1987). The functional independence measure. *Advances in Clinical Rehabilitation, 1,* 6-18.
- Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. *The Gerontologist, 9*, 179-186.
- Laniel, M. E. (2015). Self-neglect and the role of health-care professionals. *Occupational Therapy Now, 17(6*), 13–15
- Lowewen, S., & Anderson, B. (1988). Reliability of the Modified Motor Assessment Scale and the Barthel Index. *Physical Therapy, 68*, 1077-1081.
- Mahoney, F. I., & Barthel, D. (1965). Functional evaluation: The Barthel Index. *Maryland State Medical Journal, 14*, 56-61.

References

- Naik, A. D., Lai, J. M., Kunik, M. E., & Dyer, C. B. (2008b). Assessing capacity in suspected cases of self-neglect. *Geriatrics, 63(2*), 24–31.
- O'Brien, J. G. (2011). Self-neglect in old age. *Aging Health, 7,* 573–581
- Pickens, S., Burnett, J., Naik, A. D., Holmes, H. M., & Dyer, C. B. (2006). Is pain a significant factor in elder self-neglect? *Journal of Elder Abuse & Neglect, 18*, 51–61
- Rachey, K., & Janssen, S. (2021, September). Self-neglect among older adults: The role of occupational therapy in interprofessional primary care teams. AOTA's Occupational Therapy Practice. Available to AOTA members at: https://www.aota.org/Publications-News/otp/Archive/2021/self-neglect-older-adults.aspx
- Reyes-Ortiz, C. A., Burnett, J., Flores, D. V., Halphen, J. M., & Dyer, C. B. (2014). Medical implications of elder abuse: Self-neglect. *Clinics in Geriatric Medicine, 30*, 807–823. https://doi.org/10.1016/j.cger.2014.08.008
- Rogers, J. C., Holm, M. B., Chisholm, D. (2022, July 22). Performance assessment of self-care skills (PASS). *Department of Occupational Therapy, University of Pittsburgh*. Retrieved from: https://www.shrs.pitt.edu/performance-assessment-self-care-skills-pass-materials