

Eating and Feeding Issues in Older Adults with Dementia: Part I: Assessment

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WHY: Older adults with dementia are at high risk for eating and feeding difficulties, resulting in low food and fluid intake. Depending on the severity of cognitive impairment, they may forget to eat, forget they have eaten, fail to recognize food, or eat things that are not food. Independent eating performance is also compromised, resulting in difficulty with specific tasks (e.g., inability to use utensils, difficulty moving food or fluid to their mouth, chewing, and swallowing) (Aselage, 2012). Eating difficulties may have existed before hospitalization, but they are likely to worsen in the hospital because people with dementia often become more confused in an unfamiliar place.

Factors that reduce appetite and food and fluid intake in other older patients (e.g., pain, medications, nausea, dental and oral problems, and special diets) also affect patients with dementia, who are less able understand and cope with them. Because of their cognitive and related communication impairments, patients with dementia may not be able tell anyone they are hungry or that they need help eating or more time to chew and swallow. When staff members try to help, some patients with dementia resist, push the food away, refuse to open their mouths, or spit food out. These should be interpreted as signals of a problem – not necessarily a refusal to eat (Batchelor-Murphy & Crowgey, 2016).

BEST TOOL: Assessment can be challenging because of patients' cognitive and related communication impairments. The Edinburgh Feeding Evaluation in Dementia scale (EdFED) (Watson & Dreary, 1997a) is a valid and reliable observational instrument that nurses can use to identify eating and feeding difficulties and determine the level of assistance needed. The EdFED was developed and tested extensively with nurses in psychogeriatric units, nursing homes and is being translated for use outside of English-speaking groups (Liu, Watson, & Lou, 2013).

TARGET POPULATION: Older adults with diagnosed or suspected dementia.

VALIDITY AND RELIABILITY: The EdFED scale was developed through Mokken scaling of items and factor analysis. Factor analysis of responses in a study of 196 older persons with dementia demonstrated that items could be reduced to three groups of indicators (Watson & Deary, 1997a) and the three groupings were found to be the best fit through Structural Equation Modeling in 345 patients (Watson & Deary, 1997b). These indicators include: nursing interventions (first three items); patient behavior – obstinacy/aversion and passivity (next seven items) and, an indicator of feeding difficulty (last item). This instrument has been used clinically in nursing home settings and in several community-based studies and among 24 pairs of raters was found to have more than acceptable inter-rater ($r = .59, p = 0.013$) and intra-rater ($r = .95, p < 0.0001$) reliability (Watson, McDonald, & McReady, 2001; Aselage, 2010).

STRENGTHS AND LIMITATIONS: The EdFED is not clinically diagnostic, but it allows the assessor to determine the level of impairment as well as evaluate the need for possible psychosocial and clinical interventions, such as referrals for speech therapy, environmental modification, dietary alterations, environmental modification, diet alterations, and communication techniques. Mokken scaling of the seven behavior items (items 4-10) forms a hierarchy of mealtime behavior so that behavior can be predicted. The EdFED may be used as both a caregiver report and observational instrument. When observing a caregiver assist a person with dementia at meals, it is possible to also assess the quality of their interaction as construct validity of the EdFED was established with another instrument (Interaction Behavior Measure - IBM). Because eating and assistance with meals is by definition a dyadic relationship (caregiver and care receiver) and it occurs within an established environment (home, institution, restaurant), the nature of the relationship as well as the environmental culture and context needs to be evaluated if the individual with dementia is having poor outcomes (Amella & Aselage, 2012; Palan & Amella, 2011).

MORE ON THE TOPIC:

Best practice information on care of older adults: <https://consultgeri.org>.
Aselage, M.B. (2010). Measuring mealtime difficulties: eating, feeding and meal behaviours in older adults with dementia. *Journal of Clinical Nursing*, 19(5-6), 621-631.
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Liu, W., Watson, R., & Lou, F.L. (2013). The Edinburgh Feeding Evaluation in Dementia scale (EdFED): Cross-cultural validation of the simplified Chinese version in mainland China. *Journal of Clinical Nursing*, 23(1-2), 45-53. doi: 10.1111/j.1365-2702.2012.04250.x
Palan Lopez, R. Amella, E. J. (2011). Time travel: The lived experience of providing feeding assistance to a family member with dementia. *Research in Gerontological Nursing*, 4(2), 127-134.
Watson, R., & Dreary, I.J. (1997a). A longitudinal study of feeding difficulty and nursing intervention in elderly patients with dementia. *Journal of Advanced Nursing*, 26(1), 25-32.
Watson, R., & Dreary, I.J. (1997b). Feeding difficulty in elderly patients with dementia: confirmatory factor analysis. *International Journal of Nursing Studies*, 34(6), 405-414.
Watson, R., MacDonald, J., & McReady, T. (2001). The Edinburgh Feeding Evaluation in Dementia Scale #2 (EdFED #2): inter- and intra-rater reliability. *Clinical Effectiveness in Nursing*, 5(4), 184-186.
Wright, L., Cotter, D., & Hickson, M. (2008). The effectiveness of targeted feeding assistance to improve the nutritional intake of elderly dysphagic patients in hospital. *Journal of Human Nutrition and Dietetics*, 21(6), 555-562.

Edinburgh Feeding Evaluation in Dementia scale (EdFED)*

Score answers to questions 1-10: never (0), sometimes (1), often (2)

- 1. Does the patient require close supervision while feeding? _____
- 2. Does the patient require physical help with feeding? _____
- 3. Is there spillage while feeding? _____
- 4. Does the patient tend to leave food on the plate at the end of the meal? _____
- 5. Does the patient ever refuse to eat? _____
- 6. Does the patient turn his head away while being fed? _____
- 7. Does the patient refuse to open his mouth? _____
- 8. Does the patient spit out his food? _____
- 9. Does the patient leave his mouth open allowing food to drop out? _____
- 10. Does the patient refuse to swallow? _____

Total Score = _____

(Total scores range from 0 to 20, with 20 being the most serious. Scores can be used to track change.)

11. Indicate appropriate level of assistance required by patient: supportive-educative; partly compensatory; wholly compensatory

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Other Essential Assessment Guidelines

Assessing Pre-Hospital Eating and Feeding Behaviors: The nurse should ask the family or other caregivers whether the patient usually feeds him- or herself and what assistance is generally provided. This information is essential to establish a realistic target for maintaining the patient's self-feeding ability and should be included in any discharge summary when the individual moves between institutions.

Swallowing Disorders: People with dementia and eating difficulties may have swallowing disorders that are often unrecognized. These patients are sometimes labeled as combative, uncooperative, and difficult to feed when they try to refuse food they cannot swallow (Wright, Cotter, & Hickson, 2008). If assessment suggests an undiagnosed swallowing disorder, the patient should be referred to a speech pathologist for further evaluation.

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