

Pain management in persons with dementia

BODIES mnemonic helps caregivers relay pain-related signs, symptoms to physicians and nursing staff

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At any given time, 45% to 80% of nursing home residents are in some amount of self-reported pain.^{1,2}

A recent analysis found that many of these residents suffer from persistent pain at high levels; 15% of nursing home residents were reported to be in pain on two consecutive quarterly assessments and 41% were in severe pain at the second assessment.³ Persons with dementia are at particularly high risk for the under-recognition and under-treatment of pain.^{2,4} Chart-documented rates of pain are one-third to one-half of the rates found when nursing home residents with mild to moderate dementia are interviewed

verbally by researchers.^{1,5}

In a study of persons with advanced dementia admitted to a tertiary care setting, 13 of 19 had previously undiagnosed or unstable fractures.⁶ Several studies report that only one-quarter or less of the demented individuals identified as in pain received analgesics.^{5,7}

Under-treatment of pain is associated with gait disturbances, falls, malnutrition, increased morbidity, increased mortality, functional disability, sleep disturbances, decreased socialization, depression, impaired immune function, agitated behavior, and increased health care use and costs.⁷⁻¹⁰ Sedation induced by inappropriate pain medication may de-

crease activity predisposing the resident to further functional decline, falls, and pressure ulcers.¹¹

Appropriate pain treatment, accurately titrated per the patient's needs, rests on the foundation of accurate and timely pain assessment.¹⁰ All nursing home clinical personnel, from nursing assistants through physicians, as well as family members and residents, have an important role in pain management. This paper outlines a strategy physicians can use to regularly elicit pain assessment information from all important parties.

Assessing pain

Verbal assessment is problematic in persons with dementia because of the language and higher order processing deficits that accompany even mild dementia.¹² Accurate self-reporting of pain requires the ability to:

- understand the question in a pain rating,
- recall pain events in the given time frame
- accurately interpret the experience of noxious stimuli as painful events.

It is not surprising that even after the exclusion of residents so severely demented that they could not answer yes/no questions, 17% of the demented individuals in one study were unable to answer any of 5 simple verbal pain rating scales, and only 32% meaningfully responded to all 5 scales.¹ These simple assessment instruments have close to 100% completion rates in non-demented sam-

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Disclosures:

A. Lynn Snow receives research and salary support from the Veterans Affairs Health Services Research & Development Service and Baylor College of Medicine, and consultancy funding from the National Institute of Mental Health (Louis Burgo, Principal Investigator). She holds no stock in relevant companies and no patents.

Mary P. Rapp receives research and salary support from the University of Texas Health Science Center at Houston, and is part owner of Geriatric Associates of America, a geriatrics group practice providing long-term care consultation.

Mark E. Kunik receives research and salary support from the Veterans Affairs Health Services Research & Development Service and Baylor College of Medicine. He holds no stock in relevant companies and no patents.

ples. Therefore, the ability to respond to a verbal pain assessment is generally associated with the level of cognitive impairment.¹³

Based on practice guidelines of the American Geriatrics Society, and the American Medical Directors Association, one best practice approach to pain assessment in persons with dementia is to combine three methods:

- ASK the person if they are experiencing pain,
- LOOK for behavioral signs of pain,
- INVESTIGATE for recent behavioral changes that might be due to pain (Table 1).¹⁴⁻¹⁵

Because pain symptoms in persons with dementia overlap with symptoms of other states of discomfort, and with syndromes, such as depression and delirium, the physician will need to engage in a careful, systematic assessment of the patient to determine the cause of the symptoms. This assessment should include determining the time of symptom onset and conditions that exacerbate the symptoms, talking to family, and reviewing the chart for pain history information.

If initial treatment is not successful, a key consideration is intensity. Was the appropriate dose of pain medication provided? (See “Chronic pain management in older adults,” pg. 26).

Nursing staff, nursing assistants, and families need to be educated about the importance of assessing and fully treating pain, and their role in pain assessment.

Cultural beliefs

Personal and cultural beliefs about pain can affect how staff and family view pain and pain treatment. For example, some individuals may possess religious beliefs that suffering is an important part of redemption, and therefore pain at the end of life should be endured rather than alleviated. Pastoral counseling can help the patient and family explore the interface between their religious beliefs and needs for symptom control, and help the physician, patient, and family under-

Table 1 Best practice approach to pain assessment

ASK the person if he or she is experiencing pain

- Use yes/no questions
- Try words besides pain like hurt/ache/sore

LOOK for behavioral signs of pain or discomfort:

- Observations should be made both when the patient is at rest, and during movement (observe the patient during care activities that require movement such as bathing, dressing, or transfers and/or the physician could conduct gentle range of motion movements with the suspected pain site and watch the patient’s reactions)
- Facial expressions (frowning, grimacing, distorted expression, rapid blinking), verbalizations/vocalizations (sighing, moaning, calling out, asking for help, verbal abuse)
- Body movements (rigid, tense, guarding, fidgeting, increased pacing/rocking, mobility changes)

INVESTIGATE for recent behavioral changes that might be due to pain

- Changes in interpersonal interactions (aggressive, resisting care, disruptive, withdrawn)
- Changes in activity patterns (appetite change, sleep change, sudden cessation of common routines)
- Mental status changes (crying, increased confusion, irritability, distress)

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stand each other’s perspectives.

Pain myths common in American society should be explicitly discussed and sensitively explored, including:

- pain is a part of normal aging,
- pain medications are always addictive, and
- the fear that if a pain medication is taken now it might not work when the person “really” needs it.

No BODIES in Pain!

The following mnemonic will help nursing assistants and families elicit and report pain-related signs and symptoms to physicians and nursing staff.

Report to nurse/physician:

- B**—What **B**ehaviors did you see?
- O**—How **O**ften did the behaviors occur?
- D**—What was the **D**uration of the behaviors?
- I**—How **I**ntense were the behaviors?
- E**—How **E**ffective was treatment, if given?
- S**—What made the behaviors **S**tart/**S**top?

Appropriate pain management relies on the ability to measure the effects of pain treatment. Work closely with the nursing staff to develop a system to complete regularly scheduled pain assessments using a standardized assessment instrument.

Educate the family and patient (when appropriate) about indications of pain and discomfort, and encourage them to report these indications to physician and nursing staff when they are observed. If the physician wants family members to record symptom observations, the Non-communicative Patients Pain Assessment Scale might be a good choice. This scale was developed for use by untrained raters, and has been validated with nursing assistants.¹⁷

When assessing pain, use a behavioral observational scale with adequate to good reliability and validity evidence for persons with dementia.¹⁶⁻²¹ Typically these scales require the rater (usually a nurse) to observe the patient and rate presence/absence, intensity, or frequency of behaviors.

Observations should be made when the patient is experiencing movement and when the patient is at rest. Below are two case examples.

Case 1: This example involves a patient who simply needed to be asked about pain. A 76-year-old bilingual (Spanish-English) man with moderate dementia was admitted to the nursing home following a stroke. On physical exam his speech was clear; he had limited movement on the left side, and bilateral Stage 3 pressure ulcers on his heels. The pressure ulcers were being treated with normal saline wet to moist dressings. Chronic medications included antihypertensives, a multivitamin, vitamin C, and zinc.

When staff approached the patient, he asked, "Can you cut them off?" When asked for clarification, he repeated, "Can you cut them off?" Asked if his feet hurt, he replied, "Yes, very bad."

When approaching a regular or acute care visit with a nursing home patient, include a pain assessment as the fifth vital sign. The assessment includes the location, description, severity, and exacerbating and relieving factors. In this case, the resident volunteered that he was in severe pain, but could not otherwise elaborate.

The next step was to evaluate the factors contributing to the pain, and to determine if analgesics had been ordered and were being given. In this case orders had been written for acetaminophen with codeine every four hours as needed. The medication had been given sporadically on the day shift and should have been ordered around the clock.

The charge nurse stated the patient occasionally had pain with dressing changes. The nurse was unaware of the frequency of pain episodes outside of dressing changes. There was no documentation in the nurses' notes regarding the intensity or duration of the pain. Analgesics, when administered, were documented to be effective. Inspection of the wounds showed patches of yellow eschar over a pale granulating base. The wounds had not decreased in size

from the previous month.

Because of the expressed severity of the pain and failure to heal, suspicion of osteomyelitis was high. The patient was medicated for pain and transferred to a wound care facility where the diagnosis was confirmed and he was successfully treated.

Even though the patient could not be specific on all aspects of the assessment, the BODIES mnemonic was used to guide the assessment. Staff was able to observe a **Behavioral** expression of pain and the nurses acknowledged that dressing changes were painful (**Often**) and may contribute to starting the pain. **Duration** of pain was more difficult to ascertain, but listening to the patient gave clues as to **Intensity**. The analgesic may have been **Effective** in **Stopping** the pain at least temporarily, but was insufficient.

Ability to respond to a verbal pain assessment may be associated with level of cognitive impairment

Case 2: This example involves a patient with impaired communication, who needed an appropriate observational assessment with interpretation. When approaching a patient whose speech is limited, or who has dementia, observe for behavioral signs of discomfort: a facial grimace, wince, or worrisome expression.

An 82-year-old female with a right side stroke was relaxed at rest and occasionally smiled, but seemed vigilant of her surroundings. During a bedside examination her expression was fearful. Her eyes opened wide as she quickly turned her head to glance at her right arm. The slightest touch of her right arm provoked facial grimaces.

She shook her head forcefully and was tearful with gentle range of motion.


The resident had **Behavioral** signs of pain including hypervigilance, facial grimacing, and tears. Staff observed that **Onset** of pain was precipitated by range of motion, or caregiving activities that caused movement of the arm. The resident appeared comfortable at rest, but the **Duration** of painful episodes after limb manipulation was unknown and needed further observation. The **Intensity** was assumed to be severe based on her fearfulness, grimacing, and crying. No interventions had been tested, so the **Effectiveness** of analgesics, positioning, or physical therapy could not be evaluated. The nurses had observed that movement **Started** the behaviors.

The patient's hypervigilance, grimace and tears were interpreted as signs of unrelieved pain. The source of the pain needed to be determined. Gentle range of motion was performed on other extremities. No signs were elicited in the remaining musculoskeletal exam.

According to the nurse, the arm had been x-rayed and "there was nothing wrong with her arm." The patient's history of a stroke combined with palpation of the arm indicated the diagnosis was most likely regional pain syndrome. Bedside teaching was conducted regarding regional pain syndrome and non-verbal expressions of pain. The pain was eventually controlled with a combination of physical therapy and appropriate analgesics.

Conclusion

These cases prompted this nursing home to form an interdisciplinary pain management team. They used the BODIES mnemonic to develop a system for nursing assistants to regularly observe and report pain signs and symptoms. Using information from BODIES, the nurses created a personal profile of pain expression in the affected residents. This profile was subsequently used to evaluate the effectiveness of interventions.

Pain should be assessed at least as often as the vital signs are assessed. Because older adults may have difficulty verbally expressing pain, healthcare providers need to be observant of non-verbal behavioral signs such as grimacing, wincing, and fearfulness. 

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Acknowledgments: *This material is based upon work supported by the Veterans Affairs Health Services Research and Development Service (RCD 01-008-1), the National Institute of Mental Health (R03-MH6403-3-01), the Houston Center for Quality of Care & Utilization Studies, the Veterans Affairs South Central Mental Illness Research, Education and Clinical Center, and the VA HSR&D Measurement Excellence and Training Resource Information Center (METRIC; RES 02-235); Dr. Snow is a METRIC core investigator.*

Upcoming in Geriatrics



Upcoming articles in this evidence-based series will discuss prescription medication interactions with the following:

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