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## Assessing Pain in Older Adults with Dementia

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**WHY:** Pain in older adults is very often undertreated, and it may be especially so in older adults with severe dementia. Changes in a patient's ability to communicate verbally present special challenges in treating pain, since self-report is considered the gold standard of pain assessment.

As with all older adults, those with dementia are at risk for multiple sources and types of pain, including chronic pain from conditions such as osteoarthritis and acute pain from surgery, injury, and infection. Untreated pain in cognitively impaired older adults can delay healing, disturb sleep and activity patterns, reduce function, reduce quality of life, and prolong hospitalization.

**BEST TOOLS:** The best tool for use in this population is a comprehensive pain assessment (Horgas, 2017) that includes self-report and objective measures of pain. Reid and colleagues (2015) provide a comprehensive protocol and geriatric pain assessment form.

For patients with dementia, The American Society for Pain Management Nursing's Task Force on Pain Assessment in the Nonverbal Patient (Herr, Coyne, et al., 2006) recommends a comprehensive, hierarchical approach to pain assessment that incorporates the following steps:

- Ask older adults with dementia about their pain. Even older adults with mild to moderate dementia can respond to simple questions about their pain.
- Use a standardized tool to assess pain intensity, such as the numerical rating scale (NRS) (0-10) or a verbal descriptor scale (VDS) (Herr, Coyne, et al., 2006). The VDS asks participants to select a word that best describes their present pain (e.g., no pain to worst pain imaginable) and may be more reliable than the NRS in older adults with dementia.
- Use an observational tool to measure the presence of pain in older adults with dementia. Choose one and use it consistently to assess change over time.
- Ask family or usual caregivers as to whether the patient's current behavior (e.g., crying out, restlessness) is different from their customary behavior. This change in behavior may signal pain.
- If pain is suspected, consider a time-limited trial of an appropriate type and dose of an analgesic agent. Thoroughly investigate behavior changes to rule out other causes. Use self-report and observational pain measures to evaluate the pain before and after administering the analgesic.

Several objective tools are available to measure pain in older adults with dementia. The Pain Assessment in Advanced Dementia Scale (PAINAD) has been widely used, translated into many languages, and endorsed by The American Medical Directors Association (Warden, Hurley, & Volicer, 2003). The PAINAD assesses five items: breathing, negative vocalizations, facial expression, body language, and consolability. Items are scored on a 0-2 scale and summed. A sum score of 2 is considered a cut-off value that should trigger pain treatment (Zwakhalen, van der Steen, & Najim, 2012).

More recently, the Mobilization-Observation-Behaviour-Intensity-Dementia Pain Scale (MOBID-2) has gained support as a reliable and valid measure of pain behaviors in patients with advanced dementia (Husebo et al., 2010). Pain behaviors of vocalizations, facial expressions (e.g., grimacing), and body movements (e.g., defensive positions such as guarding or pushing) are assessed. The MOBID-2 has two parts. Part 1 assesses pain related to the musculoskeletal system (the most common cause of pain in older adults) during a set of standardized, guided movements during morning care (5 items). Part 2 assesses pain that might originate from internal organs, head, and skin and is monitored over time (5 items). If a pain behavior is detected, pain intensity is rated by direct caregivers using a 0-10 numerical rating scale.

**TARGET POPULATION:** Older adults with cognitive impairment who cannot be assessed for pain using standardized pain assessment instruments. Pain assessment in older adults with cognitive impairment is essential for both planned or emergent hospitalization.

### VALIDITY AND RELIABILITY:

**PAINAD:** The PAINAD has an internal consistency reliability ranging from 0.50 (for behavior assessed at rest) to 0.67 (for behaviors assessed during unpleasant caregiving activities). Interrater reliability is high ( $r = 0.82 - 0.97$ ). The PAINAD scale is reported to have moderate to high concurrent validity, depending on whether the patient was at rest or involved in pleasant or unpleasant activities ( $r = 0.76$  to  $0.95$ ).

**MOBID-2:** The MOBID-2 has demonstrated high inter- and intra-rater and test-retest reliability (Sandvik et al., 2014). Internal consistency reliability was also high, with Cronbach's alpha ranging from 0.82 - 0.84 (Husebo et al., 2010). Importantly, the MOBID-2 has demonstrated sensitivity to pain treatment and, to date, is the only behavioral measure to establish this important dimension of pain treatment (Husebo, Osetlo, & Strand, 2014).

**STRENGTHS AND LIMITATIONS:** Pain is a subjective experience and there are no definitive, universal tests for pain. For patients with dementia, it is particularly important to know the patient and to consult with family and usual caregivers.

**BARRIERS to PAIN MANAGEMENT in OLDER ADULTS with DEMENTIA:** There are many barriers to effective pain management in this population. Some common myths are: pain is a normal part of aging; if a person doesn't verbalize that they have pain, they must not be experiencing it; and that strong analgesics (e.g., opioids) must be avoided.

There are also some barriers to using observational tools to assess pain in this population. Some of the PAINAD scale behaviors, such as breathing and consolability, may be difficult to assess. The MOBID-2 requires assessment during movement and caregiver must be trained in use of the tool

**SUMMARY:** An effective approach to pain management in older adults with dementia is to assume that they do have pain if they have conditions and/or medical procedures that are typically associated with pain. Take a proactive approach in pain assessment and management. The use of a standardized pain assessment tool is important in measuring pain. It enables health care providers to document their assessment, measure change in pain, evaluate treatment effectiveness, and communicate to other health care providers, the patient, and the family.

### MORE ON THE TOPIC:

- Best practice information on care of older adults: <https://consultgeri.org>
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# Pain Assessment in Advanced Dementia (PAINAD) Scale

Items*	0	1	2	Score
Breathing independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation.	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low level speech with a negative or disapproving quality.	Repeated troubled calling out. Loud moaning or groaning. Crying.	
Facial expression	Smiling or inexpressive	Sad. Frightened. Frown.	Facial grimacing.	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting.	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out.	
Consolability	No need to console	Distracted or reassured by voice or touch.	Unable to console, distract or reassure.	
				Total**

\* Five-item observational tool (see the description of each item below).

\*\* Total scores range from 0 to 10 (based on a scale of 0 to 2 for five items), with a higher score indicating more severe pain (0= no pain to 10= severe pain).

## BREATHING

1. Normal breathing is characterized by effortless, quiet, rhythmic (smooth) respirations.
2. Occasional labored breathing is characterized by episodic bursts of harsh, difficult or wearing respirations.
3. Short period of hyperventilation is characterized by intervals of rapid, deep breaths lasting a short period of time.
4. Noisy labored breathing is characterized by negative sounding respirations on inspiration or expiration. They may be loud, gurgling, or wheezing. They appear strenuous or wearing.
5. Long period of hyperventilation is characterized by an excessive rate and depth of respirations lasting a considerable time.
6. Cheyne-Stokes respirations are characterized by rhythmic waxing and waning of breathing from very deep to shallow respirations with periods of apnea (cessation of breathing).

## NEGATIVE VOCALIZATION

1. None is characterized by speech or vocalization that has a neutral or pleasant quality.
2. Occasional moan or groan is characterized by mournful or murmuring sounds, wails or laments. Groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
3. Low level speech with a negative or disapproving quality is characterized by muttering, mumbling, whining, grumbling, or swearing in a low volume with a complaining, sarcastic or caustic tone.
4. Repeated troubled calling out is characterized by phrases or words being used over and over in a tone that suggests anxiety, uneasiness, or distress.
5. Loud moaning or groaning is characterized by mournful or murmuring sounds, wails or laments much louder than usual volume. Loud groaning is characterized by louder than usual inarticulate

- involuntary sounds, often abruptly beginning and ending.
6. Crying is characterized by an utterance of emotion accompanied by tears. There may be sobbing or quiet weeping.

## FACIAL EXPRESSION

1. Smiling is characterized by upturned corners of the mouth, brightening of the eyes and a look of pleasure or contentment. Inexpressive refers to a neutral, at ease, relaxed, or blank look.
2. Sad is characterized by an unhappy, lonesome, sorrowful, or dejected look. There may be tears in the eyes.
3. Frightened is characterized by a look of fear, alarm or heightened anxiety. Eyes appear wide open.
4. Frown is characterized by a downward turn of the corners of the mouth. Increased facial wrinkling in the forehead and around the mouth may appear.
5. Facial grimacing is characterized by a distorted, distressed look. The brow is more wrinkled as is the area around the mouth. Eyes may be squeezed shut.

## BODY LANGUAGE

1. Relaxed is characterized by a calm, restful, mellow appearance. The person seems to be taking it easy.
2. Tense is characterized by a strained, apprehensive or worried appearance. The jaw may be clenched (exclude any contractures).
3. Distressed pacing is characterized by activity that seems unsettled. There may be a fearful, worried, or disturbed element present. The rate may be faster or slower.
4. Fidgeting is characterized by restless movement. Squirming about or wiggling in the chair may occur. The person might be hitching a chair across the room. Repetitive touching, tugging or rubbing body parts can also be

- observed.
5. Rigid is characterized by stiffening of the body. The arms and/or legs are tight and inflexible. The trunk may appear straight and unyielding (exclude any contractures).
  6. Fists clenched is characterized by tightly closed hands. They may be opened and closed repeatedly or held tightly shut.
  7. Knees pulled up is characterized by flexing the legs and drawing the knees up toward the chest. An overall troubled appearance (exclude any contractures).
  8. Pulling or pushing away is characterized by resistiveness upon approach or to care. The person is trying to escape by yanking or wrenching him or herself free or shoving you away.
  9. Striking out is characterized by hitting, kicking, grabbing, punching, biting, or other form of personal assault.

## CONSOLABILITY

1. No need to console is characterized by a sense of well being. The person appears content.
2. Distracted or reassured by voice or touch is characterized by a disruption in the behavior when the person is spoken to or touched. The behavior stops during the period of interaction with no indication that the person is at all distressed.
3. Unable to console, distract or reassure is characterized by the inability to sooth the person or stop a behavior with words or actions. No amount of comforting, verbal or physical, will alleviate the behavior.

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