How To try this

CE 2.5 HOURS Continuing Education

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Pain Assessment in People with Dementia

The Pain Assessment in Advanced Dementia (PAINAD) scale relies on observation of five behavioral indicators of pain.

Ed Eckstein

Overview: 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, and unrelieved pain can have serious consequences, including declines in physical function and diminished appetite. The Pain Assessment in Advanced Dementia (PAINAD) scale has been designed to assess pain in this population by looking at five specific indicators: breathing, vocalization, facial expression, body language, and consolability. A trained nurse or other health care worker can use the scale in less than five minutes of observation. For an online video showing nurses using the PAINAD scale and other pain-assessment tools, go to http://links.lww.com/A251.

Web Video

Watch a video demonstrating the use of the Pain Assessment in Advanced Dementia (PAINAD) scale and other pain-assessment tools at http://links.lww.com/A251.

A Closer Look

Get more information on why it's important for nurses to screen for pain in patients with dementia, as well as why the PAINAD scale is a good tool for doing so.

Try This: Pain Assessment in Advanced Dementia Scale

This is the tool in its original form. See page 67.

Online Only

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Harvey Chasen, 76, has lived in a nursing home for two years. He has advanced Alzheimer's disease and cannot communicate verbally. (This case is a composite based on our clinical experience.) He requires help with all activities of daily living and spends a good part of each day rolling himself through the facility in his wheelchair. His wife, Martha, visits once a week. He has severe arthritis in both knees, for which he receives cortisone injections every three months; he is also given acetaminophen (Tylenol and others) on an as-needed basis. Now, about a month after his most recent injection, his nurse notices a change in his behavior. Each morning, he is reluctant to get into his wheelchair: he groans during the transfer, clenches his fists, and flexes his arms up to his chest. He has begun to push caregivers away or to grab their arms during care. He hits other residents, and is no longer wheeling himself around. Recognizing that such behaviors may be caused by unrelieved pain, his nurse decides to perform an evaluation using the Pain Assessment in Advanced Dementia (PAINAD) scale.

THE PAINAD SCALE

The PAINAD scale is a behavior-observation tool developed for use in patients whose dementia is so advanced that they can't verbally communicate the fact that they're in pain. Designed for easy use, it requires a brief training-and-observation period. In developing the PAINAD scale, researchers successfully measured pain (as determined by comparing the results against those obtained using the *Discomfort Scale for Dementia of the Alzheimer Type* [DS-DAT]) after a two-hour training session; they assessed patients for five minutes in three different settings (at rest, during a pleasant activity such as watching a movie, and during an unpleasant activity such as using the bathroom).[1] That pilot study revealed that the PAINAD scale "successfully measured pain in individuals with advanced dementia, who were unable to use any of the available pain assessment tools that have been used with cognitively impaired individuals."

The PAINAD scale was adapted from the DS-DAT and the Face, Legs, Activity, Cry, Consolability Scale (the latter of which is used to assess pain in infants).

Why Assess for Pain in Patients with Advanced Dementia?

There is growing recognition of the problem of pain in older adults, the effects of pain on everyday function and quality of life, and the difficulties of assessing and managing pain in patients with dementia. Indeed, among older adults with dementia who are in long-term care, the prevalence of pain or potentially painful conditions is high, with estimates ranging from 43% to 71%.[2] Yet pain is underdiagnosed and undertreated in this population.[3]

Older adults with advanced dementia cannot report pain because of cognitive and verbal deficits (losses of memory and judgment, confusion, and attention and language deficits). Instead, such patients may express pain or discomfort through a number of behaviors, including restless physical movements and various distressed vocalizations such as moaning and yelling. Furthermore, pain can be exacerbated by the movement that occurs with activities of daily living, such as bathing, dressing, and transferring. During such activities, pain may be exhibited by other behaviors, such as resisting care, clenching fists, grabbing the caregiver, guarding, and becoming rigid. In addition to causing needless suffering, unrelieved pain in people with dementia can have serious consequences, including declines in physical function, diminished appetite, irritability, reduced participation in social activities, and depression.[2] (To see a discussion of the need for ongoing assessment of pain in older adults, go to http://links.lww.com/A254.)

The *Try This* tool, *Assessing Pain in Older Adults with Dementia*, on page 68, details the use of the PAINAD scale, which was designed to assess the following five areas for possible indicators of pain in patients with severe dementia:

- breathing: labored breathing or hyperventilating
- vocalization: moaning or crying
- facial expression: frowning or grimacing
- body language: clenching fists or pushing away caregivers
- consolability: an inability to be comforted

Each item is scored on a scale of 0 to 2. When scores from the five indicators are totaled, the patient's score can range from 0 (no pain) to 10 (severe pain). The intention was to create a 0-to-10 pain-rating scale for people with advanced dementia that relies on observation and is similar to the commonly used 0-to-10 pain-rating scale that relies on the patient's own report of pain. (See "Using Pain-Rating Scales with Older Adults," June); to watch the portion of the online video discussing those scales, go to http://links.lww.com/A252.)

The PAINAD scale's value is twofold. First, in combination with other assessments (for example, monitoring known sources of pain such as acute or chronic conditions), the PAINAD scale can assure the clinician that behaviors are (or are not) pain related. Second, because behaviors that might indicate pain are not the same in all people with dementia, it's useful to evaluate a patient's actions in a consistent manner using a single tool. This helps the provider to recognize the patient's unique behavioral patterns and thereby detect changes. It's important to remember that "pain profiles" will differ—some people may exhibit behaviors indicative of pain that are not included on the PAINAD scale. Some behaviors not included are changes in interpersonal interactions (becoming withdrawn, decreasing social interactions), changes in activity patterns (such as in sleeping or eating), and changes in mental status (increased confusion). It's therefore important for clinicians to recognize a patient's pain profile, which will aid in the timely treatment of underlying conditions. (See *Why Assess for Pain in Patients with Advanced Dementia?* at left.[2,3])

ADMINISTERING THE PAINAD SCALE

An important first step for clinicians in assessing pain in people with dementia is becoming aware of its possible indicators; some commonly ignored behaviors in this population indicate pain. Regular use of the PAINAD scale, along with other recommended assessments (such as monitoring any behavioral changes and attempting to obtain the patient's report of pain[4]), will increase nurses' confidence in using this tool, even though a range of behavioral cues may indicate pain in patients with severe dementia. (To watch the portion of the online video in which nurses use the PAINAD scale with a patient, go to http://links.lww.com/A253.)

Mr. Chasen's pain is scored twice with the PAINAD scale. His nurse observes him first at rest, before breakfast, sitting in his wheelchair. She notes that his breathing is normal and assigns a score of 0 to this item. He remains quiet and calm, and his face is inexpressive, so she assigns a 0 to three indicators: vocalizations, consolability, and facial expression. But his shoulders and upper body appear tense, and he fidgets with his clothes. For this, he earns a score of 1 in the body language category.

Later in the morning, Mr. Chasen's nurse observes him as he is being transferred back to bed. (Although

Remember . . .

- Some "nonverbal" people with dementia can indicate with head nodding or vocalization ("uh-huh") whether they have pain; these patients can be assessed with the Pain Assessment in Advanced Dementia scale.
- Knowing the person's usual functional status and patterns of behavior and activity is essential for identifying deviations that might indicate a new problem with pain.
- Pain is often exacerbated by the touching and moving associated with providing care.
- Pain assessment should include the patient's own report (when possible), as well as observation, and should be incorporated into regular, routine assessment. Gathering ongoing data about the behaviors that individual patients display when they experience pain will increase providers' confidence in conclusions about pain assessment and should improve pain treatment.

it's appropriate for nurses to use the PAINAD scale while providing care, it's not recommended in certain instances. For example, when a nurse assists in a transfer, it may be difficult for her or him to observe and score the patient's facial expression.) During the transfer his breathing appears occasionally labored, and he has short periods of hyperventilation; therefore, his nurse gives him a score of 1 in the breathing category. He moans softly several times, earning a score of 1 in the vocalizations category. His face remains inexpressive, so he is given a score of 0 in the facial expressions category, but he receives a score of 2 in body language after he violently strikes out with clenched fists as the nurses transfer him. Finally, because he's not reassured or distracted when a nurse touches him on the arm and speaks softly to him, he receives a score of 2 in consolability.

Challenges that may arise. It may be difficult to determine whether a particular behavior is related to pain or to something else, such as anxiety or being too cold. Some behaviors may be inconsistent or very subtle; detecting subtle changes may require nurses to get to know the patient better by observing her or him at different times over the course of several days. (For a more in-depth discussion, see "Behaviors Associated with Dementia," *A New Look at the Old,* July 2005.)

SCORING AND INTERPRETING THE RESULTS

Using the definitions provided in the tool, raters assign a score (ranging from 0 to 2) for each of the five areas assessed. These five scores are then totaled; the final score will range from 0 to 10, with 0 indicating no pain and 10 indicating severe pain. No interpretation of the intermediate scores is provided. Any item scored as 1 or 2 indicates that the person is in some type of pain or discomfort and should be followed up with additional assessments.

The creators of the PAINAD scale have given no specific guidance on the treatment of pain according to each score. The soundness of using a 0-to-10 behavioral scale to rate the severity of pain has not been established.[5] At the most general level, a score of 1 would indicate mild pain and a score of 10 would indicate severe pain. Mild pain (a total score of 1 or 2) warrants comfort measures (such nonpharmacologic approaches as repositioning or distraction, or a mild analgesic such as acetaminophen); moderate-to-severe pain (a total score of 5 to 10) warrants stronger analgesia, such as an opioid, as well as comfort measures.

The American Society for Pain Management Nursing's Task Force on Pain Assessment in the Nonverbal Patient recommends a comprehensive, hierarchical approach that includes the following five steps: obtain the patient's report of pain, look for potential causes of pain, observe the patient's behavior, obtain surrogate reports of pain or ask others about changes in the patient's behaviors and activities, and attempt an analgesic trial to try to reduce or eliminate pain indicators.[4,6]

Mr. Chasen's total score on the PAINAD scale is 1 at rest and 6 during transfer. The higher score on the second assessment is not surprising; often, more pain-related behaviors are seen during movements involved in bathing, getting out of bed, or dressing.[7] But both scores indicate pain and indicate the need for further assessment and a more aggressive pain-treatment plan. Because Mr. Chasen has a known history of chronic pain caused by arthritis, his analgesic regimen is reviewed. When acetaminophen is given and his pain continues, he is given liquid morphine 5 mg by mouth. Mr. Chasen's pain-related behaviors are alleviated and his mobility improves significantly at a dosage of 5 mg every six hours. At this point, he is switched to long-acting morphine, 15 mg every 12 hours by mouth, for round-the-clock comfort.[8] The PAINAD scale is used every four to six hours to monitor the effects of his new medication regimen. (Indeed, even if it is unclear whether a patient is in pain, analgesics can be tried. If PAINAD scale scores improve after new medication is given, it can be assumed that pain was present.)

Since pain-related behaviors have been seen during Mr. Chasen's care, the caregivers evaluate and modify their approach to care. All caregivers are asked to consider the following questions.

- Is Mr. Chasen handled gently?
- Is he given warnings before he's touched or moved?
- Is he kept covered and warm while care is given?

Watch It!

Go to http://links.lww.com/A251 to see how nurses assess older adults for pain. To watch a nurse use the Pain Assessment in Advanced Dementia scale, go to http://links.lww.com/A253. Then watch the health care team plan preventive strategies.

View the video in its entirety and then apply for CE credit at www.nursingcenter.com/AJNolderadults; click on the *How to Try This* series link. All videos are free and in a downloadable format (not streaming video) that requires Windows Media Player.

- Are you attending to his behavioral cues and not rushing through activities?
- Do you stop care activities when he resists them?

A comprehensive list of pain-minimizing caregiving approaches related to dressing, moving, shaving, and other care activities can be found in Talerico and colleagues' article "Psychosocial Approaches to Prevent and Minimize Pain in People With Dementia During Morning Care" in the July–September 2006 issue of *Alzheimer's Care Quarterly* (now called *Alzheimer's Care Today*).[7] For an excerpt from that article, go to http://links.lww.com/A454.

Reassessment. Between 1999 and 2001, both the Joint Commission and the Veterans Health Administration launched initiatives to make pain the fifth vital sign and to establish patients' rights and standards of care for pain management. They recommend regular assessment of pain at least every four hours in acute care settings, at the same time other vital signs are assessed. In long-term care settings, assessment is likely to occur less frequently—daily, for instance. In people with advanced dementia who also have any known chronic painful condition, pain should be assessed regularly—every four to six hours at a minimum—using the PAINAD scale. When acute pain is present, pain may subside and the PAINAD scale might be administered daily or less often. For chronic pain, the use of the PAINAD scale would continue indefinitely.

CHALLENGES OF USING THE PAINAD

The PAINAD scale was developed using a sample of 19 white, male veterans with dementia, as well as a retrospective chart review of 25 others.[1] That was a small sample, and there may be differences in pain expression between women and men with severe dementia, or among men with dementia who aren't veterans. When working with people with advanced dementia, nurses should remember that it's impossible to determine whether a person is in pain through behavior alone.[9] Thus, the pain indicators in the PAINAD scale (or any other behavioral pain measure) should not be considered definitive. Rather, such a scale should be used within a broader, more comprehensive pain-assessment protocol. This would include trying to obtain the patient's report of pain, investigating possible causes of pain (such as injury or illness), getting information from surrogates, and possibly starting an analgesic trial.[4] It's also important for nurses to talk with family members to ascertain behaviors, or changes in behaviors, that indicated pain when the patient was younger or more cognitively intact.

In addition, no specific instructions are given for how long, how often, or under what circumstances a patient should be observed in the clinical setting before the PAINAD scale is used. Pain is not a constant phenomenon; it can vary throughout the day and according to activity,[7] which is why ongoing assessment is necessary. For clinical purposes, it's important to use this scale at different times of day and during different activities, including care provision. The PAINAD scale can be incorporated into routine vital sign assessment, morning or evening care, or the activity of transferring out of bed.

Translations. The PAINAD scale has been translated into Dutch, Italian, and German.[10-12]

COMMUNICATING THE RESULTS

It's important that everyone involved in a patient's care be told what her or his specific pain behaviors are; this will enable all caregivers to monitor and modify their approaches in order to minimize pain.[7] Caregivers should be instructed to monitor for behaviors that might indicate pain and report them to the nursing staff when they occur; the administration of the PAINAD scale by family caregivers has not been tested. It's also important that family members be told about results of pain assessments; they may have fears about the use of opioids in treating pain. When they're involved at every step of the way in assessing and treating pain, they will be prepared if opioids become necessary.[8] Also, if an older adult with severe dementia requires admission to an acute care facility, it's important that the hospital's nurse or physician be told what the pain treatment plan has been. Ongoing analgesic regimens, especially medications, should not be stopped in the hospital unless absolutely necessary.

try this:
alzheimer's association
Best Practices in Nursing Care for Hospitalized Older Adults with dementia
from The John A. Hartford Institute for Geriatric Nursing and the Alzheimer's Association

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Assessing Pain in Older Adults with Dementia

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WHY: There is no evidence that older adults with dementia physiologically experience less pain than do other older adults (American Geriatrics Society (AGS), 2002). Rather than being less sensitive to pain, cognitively-impaired elders may fail to interpret sensations as painful, are often less able to recall their pain, and may not be able to verbally communicate it to care providers (AGS, 2002). As such, cognitively impaired older adults are often under-treated for pain.

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. 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:
Several tools are available to measure pain in older adults with dementia. Few have been comprehensively evaluated and each has strengths and limitations (Herr, Decker, & Bjoro, 2006). The American Medical Directors Association has endorsed the Pain Assessment in Advanced Dementia Scale (PAINAD) (Warden, et al, 2003).

We recommend the following:

- Ask older adults with dementia about their pain. Even older adults with mild to moderate dementia can respond to simple questions about their pain (American Geriatrics Society, 2002).
- Use a standardized tool to assess pain intensity, such as the numerical rating scale (NRS) (0-10) or a verbal descriptor scale (VDS) (Herr, 2002; See also Try This: Pain Assessment). 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 (e.g., PAINAD) to measure the presence of pain in older adults with dementia.
- 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 the PAINAD to evaluate the pain before and after administering the analgesic.

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: The PAINAD has an internal consistency reliability ranging from .50 (for behavior assessed at rest) to .67 (for behaviors assessed during unpleasant caregiving activities). Interrater reliability is high (r - .82 - .97). No test-retest reliability is available.

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.

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.

MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.
American Geriatrics Society Panel on Persistent Pain in Older Persons. (2002). Clinical practice guidelines: The management of persistent pain in older persons. *JAGS, 50*, S205-S224. Available at http://www.americangeriatrics.org/products/positionpapers/persistent_pain_guide.shtml, from the American Geriatrics Society Web site, www.americangeriatrics.org.
Herr, K. (2002). Pain assessment in cognitively impaired older adults. *AJN, 102*(12), 65-68.
Herr, K., Bjoro, K., & Decker, S. (2006). Tools for assessment of pain in nonverbal older adults with dementia: A state-of-the-science review. *Journal of Pain and Symptom Management, 31*(2), 170-192.
Warden, V., Hurley, A.C., & Volicer, L. (2003). Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) Scale. *Journal of the American Medical Directors Association, 4*(1), 9-15.

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. Lowlevel 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.

Reprinted from *Journal of the American Medical Directors Association, 4*(1), 9-15. Warden, V., Hurley, A.C., & Volicer, L. Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) Scale.

Online Resources

For more information on the Pain Assessment in Advanced Dementia scale and other geriatric assessment tools and best practices, go to www.ConsultGeriRN.org—the clinical Web site of the Hartford Institute for Geriatric Nursing, New York University College of Nursing, and the Nurses Improving Care for Healthsystem Elders (NICHE) program. The site presents authoritative clinical products, resources, and continuing education opportunities that support individual nurses and practice settings.

Visit the Hartford Institute site, www.hartfordign.org, and the NICHE site, www.nicheprogram.org, for additional products and resources.

Go to www.nursingcenter.com/AJNolderadults and click on the How to Try This link to access all articles and videos in this series.

Mr. Chasen, continued. Over a period of several weeks, the nurses loosely followed the World Health Organization's three-step analgesic ladder for the treatment of cancer pain—nonopioids as the first step, followed by mild opioids and then stronger opioids. Once Mr. Chasen was receiving 15 mg of long-acting morphine twice daily, he began to wheel himself around the nursing home again. His aggressive behaviors stopped, and his hands and arms relaxed. He was assessed with the PAINAD scale once a day, and his caregivers learned to monitor his behaviors in relation to the time since his previous cortisone injection. They moved his legs more slowly and with greater gentleness when providing care. If he resisted and pushed the caregivers away, they stopped what they were doing and allowed him to remain in bed. There was a standing order for extra analgesia at such times, after which they would approach him again.

CONSIDER THIS

What evidence shows that the PAINAD scale identifies patients in pain? There are several published tools for assessing pain in people with dementia. The PAINAD scale is one of the most appropriate for use in people with advanced dementia because the behavioral indicators reflect those seen in this population. According to the original study on the PAINAD scale, it was moderately reliable and valid for measuring behaviors related to pain in the people studied (in that case, elderly, white, male veterans with advanced dementia).[1]

- *Reliability.* The PAINAD scale has moderate internal consistency (Cronbach's α coefficients ranging from 0.30 to 0.83).[1] This indicates that the five behaviors assessed are moderately associated with one another when the instrument is used in people with advanced dementia. With an objective measure of pain, interrater reliability (the extent to which two or more raters agree when using the tool) is very important. Interrater reliability for the PAINAD scale was assessed during different activities (pleasant versus unpleasant ones), and reliability coefficients were moderately high during pleasant (r = 0.93 to 0.97) and unpleasant (r = 0.82 to 0.90) activities.
- *Validity.* Establishing the validity of an observational tool for pain, such as the PAINAD scale, is difficult because people with dementia can neither verify what their behaviors mean nor respond to other tools for concurrent validity (other instruments measuring pain) and divergent validity (other instruments measuring similar, yet different conditions such as depression). The PAINAD scale, like most observational tools used in this population, was by necessity developed by a panel of expert clinicians and researchers without direct input from people with dementia. Without that input, the confidence that can be placed in the PAINAD scale is tempered. Nevertheless, some validity testing of the PAINAD scale has been reported. Warden and colleagues compared it with the DS-DAT and visual analogue scales of pain intensity and reported that the PAINAD scale had moderate to high concurrent validity, depending on whether the patient was at rest or involved in pleasant or unpleasant activities (ranging from r = 0.76 to r = 0.95).[1] Some validity testing of the PAINAD scale suggests that the breathing item varies from the other items in the tool. Warden and colleagues measured the construct validity of the PAINAD scale using factor analyses (combining data from two different studies), and 50% of the variance was explained by one factor.[1] This factor captured only four of the five behaviors assessed; breathing represented a separate factor that explained an additional 20% of the variance. This reflects moderate validity of the tool but raises questions about the extent to which breathing is internally consistent with the other behaviors assessed.
  - *Specificity and sensitivity.* Sensitivity, the test's ability to identify individuals with pain, has not been reported. Nor has specificity, the ability to exclude those who do not have pain.

Is the tool useful in older adults who have mild dementia? The PAINAD scale has not been evaluated for use in people with mild or moderate dementia. Some of the PAINAD scale behaviors, such as breathing, may be less indicative of pain in cognitively intact older adults. The patient's report of pain, combined with other instruments that provide

more detailed assessments of changes in usual activities and behaviors, may be more applicable for people with mild dementia. ▼

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Routine use of Try This *tools or approaches may require formal review and approval by your employer.*

REFERENCES

1. Warden V, et al. Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. *J Am Med Dir Assoc* 2003;4(1):9-15.
2. AGS Panel on Persistent Pain in Older Persons. The management of persistent pain in older persons. *J Am Geriatr Soc* 2002;50(6 Suppl):S205-S224.
3. Horgas AL, Tsai PF. Analgesic drug prescription and use in cognitively impaired nursing home residents. *Nurs Res* 1998;47(4):235-42.
4. Herr K, et al. Pain assessment in the nonverbal patient: position statement with clinical practice recommendations. *Pain Manag Nurs* 2006;7(2):44-52.
5. Herr K, et al. Tools for assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *J Pain Symptom Manage* 2006;31(2):170-92.
6. Hadjistavropoulos T, et al. An interdisciplinary expert consensus statement on assessment of pain in older persons. *Clin J Pain* 2007;23(1 Suppl):S1-S43.
7. Talerico KA, et al. Psychosocial approaches to prevent and minimize pain in people with dementia during morning care. *Alzheimer's Care Quarterly* 2006;7(3):163-74.
8. Miller LL, et al. Development of an intervention to reduce pain in older adults with dementia: challenges and lessons learned. *Alzheimer's Care Quarterly* 2005;6(2):154-67.
9. Horgas AL, et al. Assessing pain in persons with dementia: relationships among the non-communicative patient's pain assessment instrument, self-report, and behavioral observations. *Pain Manag Nurs* 2007;8(2):77-85.
10. Zwakhalen SM, et al. The psychometric quality and clinical usefulness of three pain assessment tools for elderly people with dementia. *Pain* 2006;126(1-3):210-20.
11. Costardi D, et al. The Italian version of the pain assessment in advanced dementia (PAINAD) scale. *Arch Gerontol Geriatr* 2007;44(2):175-80.
12. Schuler MS, et al. Psychometric properties of the German "Pain Assessment in Advanced Dementia Scale" (PAINAD-G) in nursing home residents. *J Am Med Dir Assoc* 2007;8(6):388-95.

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LEARNING OBJECTIVES: After reading this article and taking the test on the next page, you will be able to

- discuss background information helpful for understanding pain assessment in older adults who have dementia.
- outline the use of the PAINAD scale, including scoring, recommendations for use, and corroborating evidence.

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