

Pain Assessment for Older Adults

By: Ellen Flaherty, PhD, APRN, BC, Village Care of New York

WHY: Studies on pain in older adults (persons 65 years of age and older) have demonstrated that 25%-50% of community dwelling older people have persistent pain. Additionally, 45-80% of nursing home residents report pain that is often left untreated. Pain is strongly associated with depression and can result in decreased socialization, impaired ambulation and increased healthcare utilization and costs. Older adults tend to minimize or not report their pain or are unable to due to sensory and or cognitive impairments. A significant barrier in treating pain in older adults is inadequate pain assessment. Therefore, a proactive, consistent approach must be taken to screen and assess older adults for persistent pain.

BEST TOOL: Patients' self report is the most reliable measure of pain intensity as there are no biological markers of pain. Simply worded questions and tools, which can be easily understood, are the most effective, as older adults frequently encounter numerous factors, including sensory deficits and cognitive impairments. The most widely used pain intensity scales used with older adults are the Numeric Rating Scale (NRS), the Verbal Descriptor Scale (VDS) and the Faces Pain Scale-Revised (FPS-R). The most popular tool, the NRS, asks a patient to rate their pain by assigning a numerical value with zero indicating no pain and 10 representing the worst pain imaginable. The VDS asks the patient to describe their pain from "no pain" to "pain as bad as it could be." The FPS-R asks patients to describe their pain according to a facial expression that corresponds with their pain.

TARGET POPULATION: All three scales are used with both community and older adults in acute and long term care settings. While there are specific tools designed to capture pain in non-verbal cognitively impaired older adults, studies have shown that the Faces, Numeric Rating and Verbal Descriptor scales may be used effectively with cognitively impaired older adults. The choice of a scale may depend on the presence of a particular language or sensory impairment. The same scale should be used consistently with each individual patient.

VALIDITY AND RELIABILITY: Among these three scales, several studies have demonstrated concurrent validity between 0.56 and 0.90 with the lowest correlations found between the FPS-R and the other scales, suggesting that the FPS-R may be measuring a broader construct incorporating pain. Test-retest reliability was demonstrated with coefficients ranging from 0.75-0.89.

STRENGTHS AND LIMITATIONS: Overall, the NRS was the preferred scale with cognitively intact older adults and the FPS-R was the preferred scale with cognitively impaired patients. In addition, African-Americans and Hispanics preferred the FPS-R. The FPS-R was also the scale that was preferred with mildly, moderately and severely impaired older adults. These brief assessment tools should not replace performing a comprehensive health history and physical exam, which may lead to the determination of etiologies of pain.

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., 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.

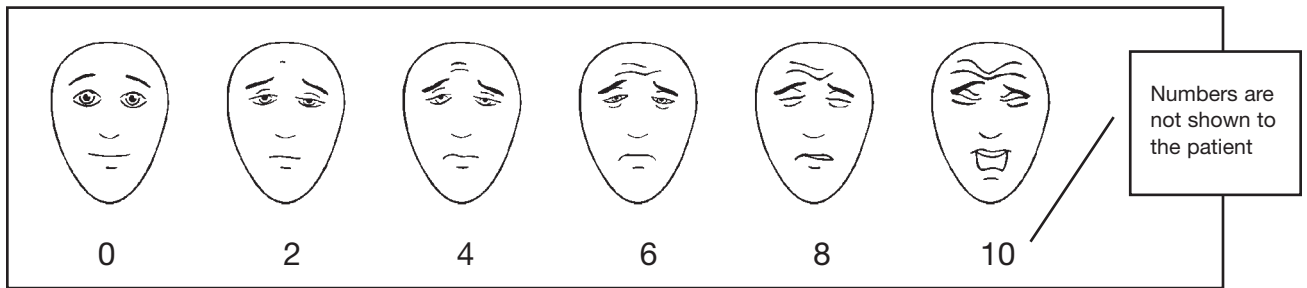
Herr, K., Spratt, K., Mobily, P., & Richardson, G. (2004). Pain intensity assessment in older adults: Use of Experimental Pain to Compare Psychometric Properties and Usability of Selected Scales in Adult and Older Populations. *Clinical Journal of Pain*, 20(4), 207-219.

Taylor, L., & Herr, K. (2003). Pain intensity assessment: A comparison of selected pain intensity scales for use in cognitively intact and cognitively impaired African American older adults. *Pain Management Nursing*, 4(2), 87-95.

Taylor, L.J., Harris, J., Epps, C., & Herr, K. (2005). Psychometric evaluation of selected pain intensity scales for use in cognitively impaired and cognitively intact older adults. *Rehabilitation Nursing*, 30(2), 55-61.

Ware, J. Epps, C., Herr, K., & Packard, A. (2006). Evaluation of the revised faces pain scale, verbal descriptor scale, numeric rating scale, and Iowa pain thermometer in older minority adults. *Pain Management Nursing*, 7(3), 117-125.

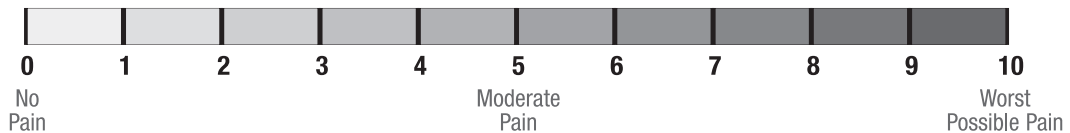
FACES PAIN SCALE – REVISED



From PAIN, 2001, 93, 173-183 "The Faces Pain Scale – Revised. Toward a Common Metric in Pediatric Pain Measurement," by C.L. Hicks, C.L. von Baeyer, P.A. Spafford, I. van Korlaar, & B. Goodenough,. Reprinted with permission of the International Association for the Study of Pain®.

Note: This is a smaller sample of the actual scale. For further instructions on the correct use of the scale in order to get valid responses, please go to www.painsourcebook.ca

NUMERIC RATING SCALE



Please rate your pain from 0 to 10 with 0 indicating no pain and 10 representing the worst possible pain. _____

Adapted from Jacox, A., Carr, D.B., Payne, R., et al. (March 1994). Management of Cancer Pain. Clinical Practice Guideline No. 9. AHCPR Publication No. 94-0592. Rockville, MD: Agency for Health Care Policy and Research, U.S. Department of Health and Human Services.

VERBAL DESCRIPTOR SCALE

Please describe your pain from “no pain” to “mild”, “moderate”, “severe”, or “pain as bad as it could be.”

Adapted from Jacox, A., Carr, D.B., Payne, R., et al. (March 1994). Management of Cancer Pain. Clinical Practice Guideline No. 9. AHCPR Publication No. 94-0592. Rockville, MD: Agency for Health Care Policy and Research, U.S. Department of Health and Human Services.

Issue Number D2, Revised 2007

Series Editor: Marie Boltz, PhD, APRN, BC, GNP
Managing Editor: Sherry A. Greenberg, MSN, APRN, BC, GNP
New York University College of Nursing

Assessing Pain in Older Adults with Dementia

By: Ann L. Horgas, RN, PhD, FGSA, FAAN, University of Florida College of Nursing

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. *AIN*, 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., Hurlley, 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. 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.	

* 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").

Total**

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.

Copyright (2003), with permission from American Medical Directors Association.

Best Practices in Nursing Care
for Hospitalized Older Adults
with dementia

alzheimer's association

A SERIES PROVIDED BY

The Hartford Institute for Geriatric Nursing

EMAIL: hartford.ign@nyu.edu
HARTFORD INSTITUTE WEBSITE: www.hartfordign.org
CONSULTGERIERN WEBSITE: www.ConsultGerIERN.org

BEHAVIORAL PAIN SCALES FOR PERSONS WITH DEMENTIA

Abbey Pain Scale¹

ADD Protocol* (Assessment of Discomfort in Dementia)²

CNPI (Checklist of Nonverbal Pain Indicators)³

Doloplus-2 Scale⁴

DS-DAT (The Discomfort Scale – Dementia of the Alzheimer's Type)⁵

FLACC (Face, Legs, Activity, Cry, Consolability)⁶

NOPPAIN (The Non-Communicative Patient's Pain Assessment Instrument)⁷

PACSLAC (Pain Assessment Checklist for Seniors with Limited Ability to Communicate)⁸

PADE (Pain Assessment for the Dementing Elderly)⁹

PAINAD (Pain Assessment in Advanced Dementia)¹⁰

RaPID (Rating Pain in Dementia)¹¹

*ADD is not an assessment tool, but a protocol for validating presence of pain

References and Online Resources

- ¹Abbey, J.A., Piller, N., DeBellis, A., Esterman, A., Parker, D., Giles, L., et al. (2004). The Abbey pain scale. A 1-minute numerical indicator for people with late stage dementia. *International Journal of Palliative Nursing*, 10(1), 6-13. To view this tool online: <http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/Abbey%20Text.htm>
- ³Feldt, K.S. (2000). The checklist of nonverbal pain indicators (CNPI). *Pain Management Nursing*, 1(1), 13-21. To view this tool online: <http://www.cityofhope.org/PRC/Review%20of%20Tools%20for%20Pain%20Assessment/CNPI%20Text.htm>
- ⁴Fuchs-Lacelle, S., & Hadjistavropoulos, T. (2004). Development and preliminary validation of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC). *Pain Management Nursing*, 5(3), 37-49. To view this tool online: [http://www.rgpc.ca/best/PAIN%20Best%20Practices20-%20ML%20Vanderhorst%20\(June%2007\)/PACSLAC.pdf](http://www.rgpc.ca/best/PAIN%20Best%20Practices20-%20ML%20Vanderhorst%20(June%2007)/PACSLAC.pdf)
- ⁵Hurley, A., Volicer, B.J., Hanrahan, P.A., Hourde, S.I., & Volicer, L. (1992). Assessment of discomfort in advanced Alzheimer's patients. *Research in Nursing & Health*, 15(5), 369-377. To view this tool online: <http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/DS-DAT.htm>
- ²Kovach, C. R., Noonan, P.E., Griffe, J., Muchka, S., & Weissman, D.E. (2001). The Assessment of Discomfort in Dementia Protocol. *Pain Management Nursing*, 3(1), 16-27. To view this tool online: <http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/ADD.htm>
- ⁶Merkel, S.I., Voepel-Lewis, T., Shayevitz, J.R., & Malviya, S. (1997). The FLACC: A behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing*, 23(3), 293-297. See: http://findarticles.com/p/articles/mi_mOFSZ/is_3_29/ai_n18615859/print; to view this tool online: <http://www.wisc.edu/trc/projects/pop/FLACCSCAle.pdf>
- ¹¹Sign, B. & Orrell, M. (2003). *The development, validity and reliability of a new scale for rating pain in dementia (RaPID)*. Unpublished manuscript.

- ⁷Snow, A. L., Weber, J. B., O'Malley, K. L., Cody, M., Beck, C., Bruera, E., Ashton, C., & Kunik, M. E. (2004). NOPPAIN: A nursing assistant administered pain assessment instrument for use in dementia. *Dementia and Geriatric Cognitive Disorders*, 17(3), 240-246. To view tool online: <http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/NO%20PAIN.htm>
- ⁹Villanueva, M. R., Smith, T. L., Erickson, J. S., Lee, A. C., & Singer, C.M. (2003). Pain Assessment for the Dementing Elderly (PADE): Reliability and validity of a new measure. *Journal of the American Medical Directors Association*, 4(1), 1-8. Tool is available in this publication.
- ¹⁰Warden, V., Hurley, A. C., & Volicer, L. (2003). Development and psychometric evaluation of the PAINAD (Pain Assessment in Advanced Dementia) scale. *Journal of the American Medical Directors Association*, 4(1), 9-15. See: <http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/PAINAD.htm> and to view tool online: http://www.cityofhope.org/prc/Review%20of%20Tools%20for%20Pain%20Assessment/Review%20of%20Tools%202004/PAINAD?PAINAD_Tool.pdf
- ⁴Wary, B., & Doloplus, C. (1999). Doloplus-2, a scale for pain measurement. *Soins Gerontol*, 19, 25-27. To view this tool online: <http://www.doloplus.com/versiongb/pdf/echelle.pdf>

Recent Reviews of Pain Assessment Tools

- Hadjistavropoulos, T., Herr, K., Turk, D., Fine, P., Dworkin, R., Helme, R., et al. (2007, January). An interdisciplinary expert consensus statement on assessment of pain in older persons. *Clinical Journal of Pain*, 23(1), S1-S43.
- Phillips, E. E. (2007, May) Pain assessment in the elderly. *U.S. Pharmacist*, 32(5), 37-52. Retrieved from: http://www.uspharmacist.com/index.asp?show=article&page+8_2019.htm
- Wheeler, M.S. (2006, June). Pain assessment and management in the patient with mild to moderate cognitive impairment. *Home Healthcare Nurse*, 24(6), 354-359. Retrieved from: <http://www.nursingcenter.com/prodev/cearticle.asp?tid=655075>
- Zwakhlen, M. G., Hamer, J., Abu-Sad, H. H., Berger, M. P. F. (2006, January) Pain in elderly people with severe dementia: A systematic review of behavioural pain assessment tools. *BMC Geriatrics*, 6:3. Retrieved from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1397844>

AGS GUIDELINES: BEHAVIORAL PAIN INDICATORS

- **Facial Expressions**
 - Slight frown; sad, frightened face
 - Grimacing, wrinkled forehead, closed or tightened eyes
 - Any distorted expression
 - Rapid blinking

- **Verbalizations, vocalizations**
 - Sighing, moaning, groaning
 - Grunting, chanting, call out, noisy breathing
 - Asking for help
 - Verbally abusive

- **Body Movements**
 - Rigid, tense body posture, guarding
 - Fidgeting
 - Increased pacing, rocking
 - Restricted movement
 - Gait or mobility changes

- **Changes in interpersonal interactions**
 - Aggressive, combative, resisting care
 - Decreased social interactions
 - Socially inappropriate, disruptive
 - Withdrawn

- **Changes in activity patterns or routines**
 - Refusing food, appetite change
 - Increase in rest periods
 - Sleep, rest pattern changes
 - Sudden cessation of common routines
 - Increased wandering

- **Mental status changes**
 - Crying or tears
 - Increased confusion
 - Irritability or distress

Bibliography and Resources

- Altilio, T. (2008). Exploring Needs Beyond the Physical. PowerPoint Presentation at Schervier Center for Research in Geriatric Care-sponsored conference on "Assessment and Treatment of Pain in Cognitively Impaired Older Adults," June 4.
- Burdick, L. (2005). The sunshine on my face: A read-aloud book for memory-challenged adults. Baltimore, MD: Health Professions Press.
- Cohen-Mansfield, J., Watson, V., & Pasis, S. (1998). Pain in participants of adult day care centers: assessment by different raters. *Journal of Pain and Symptom Management, Jan; 15(1)*, 8-17.
- Cohen-Mansfield, J., Werner, P. (1998). Longitudinal changes in behavioral problems in old age: a study in an adult day care population. *Journals of Gerontology: Series B: Psychological sciences and social sciences, 53B, 1, M65*.
- Femia, E., Zarit, S., Stephens, M., Greene, R. (2007). Impact of Adult Day Services on Behavioral and Psychological Symptoms of Dementia. *The Gerontologist, 47*, 775-788.
- Flaherty, E. (2007). Pain Assessment for Older Adults. *Hartford Institute for Geriatric Nursing: Try This: Best Practices in Nursing Care to Older Adults, 7*, unpagued.
- Fulmer, T., Ramirez, M., Fairchild, S., Holmes, D., Koren, M., Teresi, J., Werner, P. (2008). Prevalence of Elder Mistreatment as Reported by Social Workers in a Probability Sample of Adult Day Health Care Clients. *Journal of Abuse and Neglect, 11(3)*, 25-36.
- Hadjistavropoulos, T., Herr, K., Turk, D., Fine, P., Dworkin, R., Helme, R. (2007). An Interdisciplinary expert consensus statement on assessment of pain in older persons. *Clinical Journal of Pain, 23(Suppl. 1)*, S1-S43.
- Hasselkus, B. (1997). Everyday ethics in dementia day care: Narratives of crossing the line. *The Gerontologist, 37(5)*, 640-649.
- Hasselkus, B., and LaBelle, A. (1998). Dementia day care endings: the uncertain limits of care. *Journal of Applied Gerontology, 17(1)*, 3-22.
- Herr, K. (2008). Challenges and Solutions for Quality Pain Care in Cognitively Impaired Elders. PowerPoint Presentation at Schervier Center for Research in Geriatric Care-sponsored conference on "Assessment and Treatment of Pain in Cognitively Impaired Older Adults," June 4.
- 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.
- Herr, K., & Decker, S. (2004). Assessment of Pain in older adults with severe cognitive impairment. *Annals of Long-Term Care: Clinical Care and Aging, 12(4)*, 46-52.
- Herrera, A., Lee, J., Palos, G., Torres-Vigil, I. (2008). Cultural Influences in the Patterns of Long Term Care. *Journal of Applied Gerontology, 27(2)*, 141-165.
- Horgas, A. (2007). Assessing Pain in Older Adults with Dementia. *Hartford Institute for Geriatric Nursing: Try This: Best Practices in Nursing Care for Older Adults, D2*, unpagued.
- Kausler, D., Kausler, B., Krupsaw, J. (2007). The Essential Guide to Aging in the 21st Century: Mind, Body and Behavior. Columbia, MO: University of Missouri Press.
- McCaffery, M. & Pasero, C. (1999). Assessment: Underlying complexities, misconceptions and practical tools. In Pain: Clinical Manual, 2nd ed. New York: Wiley.
- Orsulic-Jeras, S., Judge, K., & Camp, C. (2000). Montessori-based activities for long-term care residents with advanced dementia: Effects on engagement and affect. *The Gerontologist, 40(1)*, 107-111.
- Palliative Care Dementia Consortium (2008). Achieving Best Practices in Palliative Care for Dementia Residents. Riverdale, NY: Schervier Center for Research in Geriatric Care.
- Schacke, C., and Zank, S. (2006). Measuring the Effectiveness of Adult Day Care as a Facility to Support Family Caregivers of Dementia Patients. *Journal of Applied Gerontology, 25(1)*, 65-81.
- Teno, J., Weitzen, S., Wetle, T., Mor, V. (2001). Persistent pain in nursing home residents. *The Journal of the American Medical Association, 285(16)*, 2081
- Thirteen (2005). City Voices: Alzheimer's disease. [Video/DVD] New York, Channel Thirteen/PBS.
- Trudeau, S. (1999) Bright Euyes: A structured sensory stimulation intervention, in Volicer, L., & Bloom-Charette, L. (eds.) Enhancing Quality of Life in Advanced Dementia. NY: Taylor and French Group.
- Volicer, L., Simard, J., Pupa, J., Medrek, R., & Riordan, M. Effects of continuous activity programming on behavioral symptoms of dementia. *JAMDA, 426-431*.
- Zank, S., Schacke, C. (2002). Evaluation of Geriatric Day Care Unites: Effects on Patients and Caregivers. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57*, P348-P357.
- Zarit, S., Stephens, M., Townsend, A., Green, R. (1998). Stress Reduction for Family Caregivers: Effects of Adult Day Care Use. *Journals of Gerontology, 53B(5)*, S267-S277.

Websites:

<http://www.ahha.org> – American Holistic Health Association

<http://www.ahna.org> – American Holistic Nurses Association

<http://www.ampainsoc.org/pub/bulletin/win06/inno1.htm> - Veterans Health Administration National Pain Management Strategy: Update and Future Directions

http://www.bethabe.org/MUSIC_INSTITUTE55.html - Institute for Music and Neurologic Function

<http://www.caninecompanions.org> – Canine Companions for Independence

<http://www.deltasociety.org> – Delta Society (Pet Therapy)

<http://www.health.state.ny.us> – New York State Department of Health website – includes Regulations for ADHCs and SNFs

<http://www.musictherapy.org> – American Music Therapy Association

<http://www.openearjournal.com> – Open Ear Center (Music Therapy)

<http://www.painedu.org> – Pain management education

<http://www.painfoundation.org/page.asp?file=Publications/eNewsletters.htm> - Pain Monitor

<http://www.painfoundation.org/page.asp?file=Publications/eNewsletters.htm> - Pain Community News

<http://www.painfoundation.org/page.asp?file=Publications/Bulletin/Index.htm> - Pain Bulletin.

<http://www.partnersagainstpain.com/index-mp.aspx?sid=3> – information on pain scales in multiple languages

<http://www.nccam.nih.gov/timetotalk> - information from NIH's National Center for Complementary and Alternative Medicine

<http://societyartshealthcare.org> – Society for the Arts in Health Care

<http://www.stoppain.org> – Beth Israel Medical Center's Department of Pain Medicine and Palliative Care