

Pain Assessment & Management

Update on Assessment, Management and Documentation of Pain in LTC

Karen S. Feldt, PhD, APRN, GNP
Associate Professor, College of Nursing
Seattle University

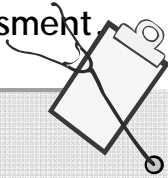
Goals for Today

- Review clinical best practices for identifying pain
- Review new research on best assessment tools
- Discuss pain medications and nonpharmacological approaches
- Discuss strategies for tracking to improve pain management

Barriers to Pain Assessment of Older Adults

- Sensory Losses: Hearing, Vision (need instruments that accommodate deficits)
- Delirium/Dementia (need instrument for nonverbal elders, or elders with cognitive changes)
- Cultural barriers, beliefs of older adults, assumptions pain is inevitable (need education for families and residents)
- Nursing barriers: Limited "hands on" care time, lack of appropriate assessment tools, lack of pain tracking sheets or flow sheets

Four Essentials of Assessment



- **Location**
 - Area of the body
 - Diffuse or localized
 - Radiates and area involved
- **Intensity**
 - Rate on Scale of severity
- **Quality**
 - Stabbing, knife-like
 - Throbbing
 - Cramping
 - Vise-like, suffocating
 - Searing, burning
 - Superficial, deep
 - Duration

Assessment Tools: Updates

Use of the 0-10 scale:

Verbal Numeric Scale: "If you could rate how bad your pain is on a scale of 0 to 10 with 0 being no pain and 10 being the worst pain, how bad would you say your pain is now"

- only 35.6% impaired elders could complete*
- error rate in using, 20%**

RECOMMENDATION: Research shows better for use in college educated males. Not best choice for others.

*Young, D. (2002) MNRS presentation

**Herr, Spratt & Garand (2007) Pain Medicine

Wong Baker Face Scale for Pain

- **Validity issues:** Are we assessing Pain or Depression?
- **What the research says:** Only one third of cognitively impaired residents able to understand
 - (Wynne, Ling, Remsburg (2000)
 - (Young, 2002)
 - (Scherder, et al, 2001)
- **RECOMMENDATION:** Not the best tool to use for elders



FACES Scale for Pain

- A more complex version of the Wong Baker scale with seven possible face expressions, less childlike than the previous scale
- Research shows NH residents had difficulty choosing the correct face from most to least pain and fewer than 1/3 of the resident could place the faces in the correct order. (Kaasalainen & Crook, 2004)
- Although preferred by minority elders in one study, is less well correlated with other pain scales. Stuppy, (1998) Applied Nurs Res. 11, 84-89.

Assessment Tools: VAS

Visual Analogue Scale: measures pain intensity



Modifications suggested by AGS Guidelines:



Assessment Tools: VAS

- Several studies note that elders with lower levels of education and difficulty with psychomotor skills have greater difficulty using the Visual Analogue Scale.
- The failure rate on the scale is between 6.7% and 19%
- Only 44% of nursing home residents were able to successfully understand and complete this scale

RECOMMENDATION: Use only after testing the residents understanding of the tool.

Herr, Spratt, Mobily & Richardson, 2004
Krulwich, London & Skakel, et al 2000

Assessment Tools

Verbal Descriptor Scale: measures pain intensity using words rather than numbers

- Pain as bad as it could be
- Extreme Pain
- Severe Pain
- Moderate Pain
- Mild Pain
- Slight Pain
- No Pain

Assessment Tools: VDS

- Verbal Descriptor Scale: is consistently rated as most preferred and easiest to use in studies of older adults*.
- The Iowa Pain Thermometer is a version of the VDS with a thermometer along side
- Elders with hearing loss can point to pain rating if printed in large print.

RECOMMENDATION: BEST TOOL FOR USE WITH ELDERS

* Several studies have reached this conclusion, see reference list

Assessment Tools

- Ferrell recommends use of pain synonyms:
 - aching, stiff
 - dull, pressure
 - burning, shooting
 - cramping
 - sore, uncomfortable

Assessment Tools for Nonverbal Elders Research Recommendations

- PAINAD (Warden, Hurley, Volicer)
- Abby Pain Scale (Abbey, J, Melbourne, Australia)
 - 6 observed items, ranked from absent to severe
- Checklist of Nonverbal Pain Indicators, CNPI (Feldt)
 - Rating 6 behaviors as present/absent.
- Noncommunicative Patient's Pain Assessment Instrument, NOPPAIN (Snow, et al) NA tool

Assessment Tools: PAINAD

PAINAD (Warden, Hurley, Volicer) Adaptation of the DS-DAT and the FLACC, includes five items
noisy breathing; negative vocalization; facial expressions; body language; consolability
Items are scored on a three point scale from 0-2
Overall possible score of 10

Assessment Tools: PAINAD

- Tool shows correlations with other pain instruments
- Consolability, an item on the instrument, is really an evaluation of a response to a nurse intervention, rather than a discrete pain behavior. Concept needs more testing for elders.
- Designed to match 0-10 Verbal Numeric Scale, but researchers warn there is no evidence to support a 1:1 correlation.

Herr, K., Bjoro, K., & Decker, S. (2006). Tools for assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *J Pain Symptom Manage*. 31 (2), 170-92.

Abbey Pain Scale

Each item is rated as:

0 = Absent, 1 = Mild, 2 = Moderate, 3 = Severe

1. Vocalization (whimpering, groaning)
2. Facial expression (looking tense, frowning, grimacing, looking frightened)
3. Change in body language (fidgeting, rocking, guarding part of the body, withdrawn)
4. Behavioral Change (increased confusion, refusing to eat, alterative in usual patterns)
5. Physiological change (temp, pulse, blood pressure outside normal limits)
6. Physical changes (skin tears, pressure areas, arthritis, contractures)

Abbey Pain Scale scoring

- 0-2 No pain
- 3-7 mild pain
- 8-13 moderate pain
- 14 + severe pain
- Comments: Some limited testing on reliability and validity. Tool has both acute and chronic pain measures mixed, may confound usefulness.

Herr, K., Bjoro, K., & Decker, S. (2006). Tools for assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *J Pain Symptom Manage*. 31 (2). 170-92.

Checklist of Nonverbal Pain Indicators

Rating 6 behaviors as present/absent both at rest and with movement:

1. Nonverbal complaints (groans, grunts, cries)
2. Facial Grimaces or Winces
3. Bracing
4. Restlessness
5. Rubbing
6. Vocalizations

Benefits/Problems with the CNPI

- + Easy and quick to use, highly rated by staff
- + Could be completed by nonprofessional staff
- Few items, limits sensitivity, may be more sensitive to acute rather than chronic pain
- Has better specificity than sensitivity: for residents not reporting pain, 85% had no observable pain behaviors, but for residents reporting pain, 53% had at least one observable behavior.

Feldt, K.S. (2000). Checklist of non-verbal pain indicators. *Pain Management Nursing*, 7(1), 13-21.

Jones, K.R., Fink, R., Hutt, E. et al, (2005). Measuring pain intensity in nursing home residents. *J Pain Symptom Manage*. 30(6), 519-27.

Assessment Tools: NOPPAIN

- Noncommunicative Patient's Pain Assessment Instrument*
 - Developed for use by nursing assistants
 - Four sections (pain observed during care, pain behaviors, VAS, and a pain thermometer).
 - Problems, tested with videos only, no real clinical situations, no guide to interpret scoring**

*Show, A.L., Weber, J.B., O'Malley, K.J. et al, (2004). NOPPAIN: a nursing assistant-administered pain assessment instrument for use in dementia. *Dementia and Geriatric Cognitive Disorders*. 17(3):240-6.

**Herr, K., Bjoro, K., & Decker, S. (2006). Tools for assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *J Pain Symptom Manage*. 31 (2), 170-92.

Common sense Assessment of Pain for Nonverbal or Impaired Elders

- Observe pain behavior during movement
- Ask family members
- Note other evidence of pain: poor appetite, depressive symptoms, sleep problems, change of function, agitated behavior, refusal of care, moans, groans, crying
- DOCUMENT FINDINGS!

Summary

- Pain is a common problem for elders
- A variety of assessment tools have been tested with older subjects
- It is possible to assess pain in cognitively impaired elders

Pain Treatment Basics

- Believe the patient's pain report
- Document assessment scale used, then use it consistently
- Structure your treatment for care needs
- Document evidence of relief or lack of relief for both non-pharmacological and pharmacological treatments

Pain Treatment Strategies

- Always use Nonpharmacological with Medications
- Non-opioid analgesics: ASA, salicylates, Acetaminophen, NSAIDS, Cox2 inhibitors
- Other: Tramadol, synthetic, centrally acting analgesic
- Opioids and combination therapies
- Adjuvant medications

Aspirin and Salicylates

- Aspirin: Generally do not use at higher doses because of risk of bleeding and drug interactions.
- Salicylate salts: Trilasate, dosing 750 mg tid, take with food, do not use in people with heart disease or renal impairment, monitor for GI bleed, use as temporary for inflammatory condition, avoid in frail elders
- See lists of drugs with salicylates

Non-opioid Analgesics

- Para-Aminophenol: Acetaminophen
 - OK for mild to moderate pain
 - Inhibits CNS prostaglandin synthesis, limited anti-inflammatory effect
 - 20-50% protein binding
 - Metabolized in liver
 - Half-life 1-4 hours
- Acetaminophen do not exceed 4 gms/24 hrs

General Recommendations

- Treat mild chronic pain with routine acetaminophen that matches resident needs
- Use 1000 mg APAP as therapeutic dose for chronic mild pain unless resident has a history of alcoholism or liver disease.

Examples of Acetaminophen Amounts

- Be knowledgeable about dose amounts of acetaminophen in opioid combination drugs
- Darvocet N 100 1-2 tabs q 3-4 hrs prn:
lowest (1 tab q 4) = 3,900 mg APAP/24 hr
highest (2 tab q 3) = 10,400 mg APAP/24 hr
- Vicoden 1-2 tabs q 3-4 hrs prn:
lowest (1 tab q 4) = 3,000 mg APAP/24 hr
highest (2 tab q 3) = 8,000 mg APAP/24 hr

Propionic Acids: NSAIDs

- | | |
|--|---|
| Actions: | Problems: |
| <ul style="list-style-type: none">▪ Analgesia: antiprostaglandin effect▪ Anti-inflammatory▪ Inhibits platelet aggregation▪ Anti-pyretic | <ul style="list-style-type: none">▪ Acute renal failure▪ GI ulceration▪ CNS dizziness▪ Peripheral edema▪ Rashes, pruritis▪ Drug interactions |

NSAIDs: General Recommendations

- Avoid long term use of long acting and high dose NSAIDs (naproxen) in older adults or persons with CHF or renal problems
- May use short acting NSAIDs (ibuprofen), short term if well-monitored (renal, gastric effects need to be documented).

Newer NSAID combination drugs!!

- Vicoprofen: newer combination of ibuprofen (200) and hydrocodone (7.5 mg)
- Combunox: combination of ibuprofen (400 mg) and oxycodone (5 mg)

You will see more of these, there are patents pending for ketoprofen and hydrocodone, & ibuprofen and hydromorphone

Be aware that the renal risks are still a problem

NSAIDS: Cox-2 inhibitors, Celebrex

- Generally OK for very **limited** use in older adults with inflammatory pain condition
- Dosing 100 mg bid (do not exceed this dose in elders)
- Silent GI bleed is possible, plan to draw labs (CBC & renal functions) & check stool for guiac as monitoring
- **DO NOT USE IN PERSONS WITH CHF or CKD!**

Pain Treatment Strategies

Chronic mild to moderate pain:
routinely scheduled acetaminophen

Or combination drug (weak opioid).

- Hydrocodone with acetaminophen
- Oxycodone with acetaminophen
- Codiene with acetaminophen
- Propoxyphene with acetaminophen

Opioid Analgesics

Actions:

- analgesia, centrally
- cough suppression
- euphoria, tranquility
- respiratory depression
- histamine release
- ↑ smooth muscle tone of GI tract

Problems:

- Histamine release interpreted as allergy
- Constipation
- Confusion/sedation
- Nausea/emesis
- ↑ intracranial pressure
- Urinary retention

Combination Opioid/Non-opioid

- OK for chronic mild to moderate pain routinely schedule acetaminophen or combination with weak opioid.
 - Hydrocodone with APAP (Vicoden) $t_{1/2} = 3.8$ hrs
 - Oxycodone with APAP (Percocet) $t_{1/2} = 3.5$ hrs
 - Codeine with APAP (Ty1 #3) $t_{1/2} = 2.5-3.5$ hrs
 - Propoxyphene with APAP (Darvocet) $t_{1/2} = 15$ hrs
- Remember Acetaminophen amounts!!

Combination Opioid/Non-opioid

Common Side Effects: Individual responses vary

- Hydrocodone: varies
- Oxycodone: Nausea
- Codeine: Constipation
- Darvocet: confusion*

* Metabolite has half-life of 34 hrs
Has 650 mg of Acetaminophen

Synthetic Analgesic: Tramadol

Actions:

- Similar to other opioid which bind to μ receptors
- Central analgesia
- No anti-inflammatory or antipyretic effect

Problems:

- Dizziness
- Somnolence
- Nausea
- Constipation
- Increased sedation
- Pruritis
- Increased seizure risk

Synthetic Analgesic: Tramadol

- Tramadol (Ultram) PROBLEMS
 - Cannot be used with MAO inhibitors
 - Watch renal functions and liver enzymes
- DO not exceed 400 mg per day. (May want to limit to only 200 in elderly). Dose q 12 hours in elders
- Ultracet (Tramadol 37.5 mg plus 325 mg APAP)
 - Better tolerated, dose 1 to 2 tabs q 4 to 6 hours
- Tramadol and ibuprofen combo patent pending

Opioid Analgesics: Morphine

Many administration options

Oral, subq, concentrate given sublingual or buccally, IV.

- All oral preps are very bitter tasting
- Can be increased to match pain without respiratory effects

Constipation is consistent ongoing side effect
Start bowel meds when starting morphine

Opioid Analgesics: Hydromorphone

- Hydromorphone (Dilaudid)
 - Is 7-10 times more potent than morphine
 - Binds to central opioid receptors
 - Half-life 1-3 hours
 - Metabolized in liver
 - Prescribe as 1- 2 mg (not 5-10 as in morphine) q 1 to 2 hrs
- Recommendation: good for use in elders who develop confusion with morphine.

Opioid Analgesics: Meperidine (Demerol)

- General Recommendation: DO NOT USE
- No good reason to give an IM option if patient is able to take meds orally
 - Short half life creates need for more med
 - Often given with Vistaril IM (an anticholinergic drug which increases confusion in elders)
 - Has been linked to post op delirium
 - Marcantonio, et al. (1994) JAMA 272(19):1518-22

Long Acting Opiates

- Guidelines for chronic moderate to severe pain recommend use of long acting medications to avoid peaks and valley of pain control.
 - Morphine sulfate extended release (MS contin)
 - Oxycodone controlled release (Oxycontin)
 - Transdermal Fentanyl (Duragesic)
 - Inexpensive long acting: methadone, levorphenol

Long Acting Opiates

- Advantages of long acting opiates
 - Fewer pills
 - Fewer peaks and valleys
- Problems with extended release opiates
 - Some formulations are EXPENSIVE
 - High starting doses
 - If problematic, takes long time to clear

Transdermal Fentanyl

- Indicated for treatment of chronic pain that cannot be managed by lesser means such as acetaminophen-opioid combinations, nonsteroidal analgesics, or PRN dosing with short-acting opioids
- Pt requires continuous opioid administration
 - Start at 12 mcg/hr patch, unless high doses of oral agents have been used. Taper other drugs after 8 to 12 hrs of patch start.
 - Do not start in opioid naïve patients

Long acting morphine/oxycodone

- MS Contin comes in 15 mg, 30 mg, 60 mg, 100 mg and 200 mg
 - Use conversion table to calculate start dose
 - Dose 8 to 12 hrs for MSContin, 12 hr for Kadian, and q day for Avinza
 - ALWAYS start a bowel regime with this medication
- Oxycontin comes as 10, 20, 40, 80 and 160.
 - Use conversion table, Dose as q 12 hrs

Methadone

- Dosing 2.5 to 5 mg q 8 to 12 hrs
- Liver metabolism, some metabolites stay active and accumulate with repeated dosing
- Half life: older adults 36 to 72 hrs, adults 8 to 59 hrs
- Question: if you give 5 mg of methadone tid times 2 days, then d/c, how long before the drug completely clears the system in an older adult?
- Answer: 15 days

Adjuvant Pain Medications

- Neuropathic pain: shooting, burning
 - Tricyclic antidepressants: Nortriptyline
 - Anticonvulsants: Gabapentin (start at 100 mg q hs), carbamazepine
 - Neuropathic pain meds: pregablin (lyrica) (start at 25 mg q hs)

Topical analgesics

- For arthritis pain
 - Capsaicin: Capzasin-P, Zostrix apply 2 -3 times per day (extract of red peppers that deplete release of substance P, gate control theory of pain). Also in Sloan's liniment (which has turpentine oil)
 - Topical Salicylate: Aspercreme, Icy Hot, Sportscreme, Mentholatum Deep Heating Rub, Banalg, Myoflex

Topical Analgesics/Anesthetics



- Topical benzocaine
 - Oragel, Orabase
- Topical Lidocaine
 - Aloe vera with lidocaine gels
 - Burn jel
 - Lidocaine patch
- Lidocaine-Prilocaine local anesthetic

Why not tough it out?

The consequences of unrelieved pain:

- Depression
- Decreased socialization
- Sleep disturbance
- Impaired ambulation
- Slowed healing
- Increased healthcare costs

Goals and Conclusions

- Make pain a necessary vital sign
- Make comfort a required goal.
- Provide pain relief to maximize physical functioning for all patients
- Reduce pain and suffering at the end of life

Meeting Regulatory Guidelines

- Revised Survey Guidelines: Pain as a new quality indicator
- Refer to MDS
- Consider residents at risk if you have checked:
Diabetes mellitus, arteriosclerotic heart disease, peripheral vascular disease, arthritis, hip fracture, osteoporosis, pathological bone fracture, cancer

Meeting Regulatory Guidelines

Other triggers for pain assessment:

- Admission/Readmission from acute hospital stay
- Referral to hospice
- Fall or recurring falls

Meeting Regulatory Guidelines

- Residents at risk must show documented pain assessment: Location, pain score and listing of nonverbal pain behaviors
- Evidence of frequent re-assessment must be documented for those who report pain

MDS Coding

- Coding instructions
 - Record
 - The frequency with which resident complains or shows evidence of pain (J2a)
 - The intensity of signs and symptoms of pain (J2b)
 - Code for the highest level of pain present in the last 7 days
 - If resident has had no pain during the observation period, J2a = 0

MDS Coding

- Definition of pain
 - Any type of physical pain or discomfort in any part of the body
 - May be localized to one area, or may be more generalized
 - May be acute or chronic
 - May be continuous or intermittent
 - May occur only at rest or only with movement

Source: Long Term Care Facility Resident Assessment Instrument User's Manual, p. 3-141

MDS Coding

- Interview the resident
 - Ensure that the resident understands the type of information the assessor is seeking
 - Believe the resident - do not second guess or judge

"The pain experience is very subjective; pain is whatever the resident says it is"

Source: RAI User's Manual, p. 3-141

MDS Coding

- Observe the resident for indications of pain
 - Verbal indicators such as moaning, crying
 - Facial expressions such as wincing, frowning, appearing tense
 - Body posture such as not wanting to move, protecting one area of the body
 - Onset or increase in restlessness, agitation, or behavior problems

MDS Coding

- Other places to look
 - E1, Sleep cycle issues; sad, apathetic, anxious appearance; loss of interest
 - E3, Change in mood
 - E4, Resisting care
 - F1, Decreased sense of initiative or involvement
 - G1, Decline in ADL function

MDS Coding

- Other places to look
 - G4, Functional limitation in range of motion
 - Section I and J1, Diseases and conditions associated with pain
 - K1, Mouth pain
 - K3, weight loss
 - L1, Oral/dental status
 - Section M, Skin and foot problems

MDS Coding

- Coding Confusion: Be Objective
 - Either pain occurred or it didn't
 - It doesn't matter for coding purposes whether the resident received pain medication or not
 - The only thing that matters is whether the resident had pain
- It is **NOT** appropriate to attempt to estimate what the pain level would have been without pain medication

Care Planning for Pain Relief



Care Planning

The goal:

To provide effective pain management that results in a *constant level of comfort* while maintaining as much function as possible

Care Planning

The problem:

Successful intervention starts with a clear statement of the problem

- Etiology of the problem - what is the pain "due to"?
- Exacerbation of the pain - what makes it worse?
- Example: Alteration in comfort related to acute pain due to right hip surgery and exacerbated by therapeutic exercises

Care Planning

Interventions should be:

- Specific to the individual resident's assessed problems
- Interdisciplinary
- Medications + non-pharmacologic
- Assessed for effectiveness within a reasonable amount of time after implementation

Care Planning

- Prevent and treat complications, such as decreased appetite, constipation, immobility
- Always respond to indications that a resident is in pain - if the care plan isn't working, change it

Sample Care Plan for Pain

1. Reposition for comfort; use pillows to support painful area.
2. Promote relaxation with back rub, warm bath, soft music, etc.
3. Teach relaxation strategies such as breathing exercises.
4. Initiate Pain Assessment Flow Sheet.
5. Offer analgesics as ordered and assess response.

Sample Care Plan for Pain

1. Medicate prior to activity to increase participation.
2. Reduce or eliminate side effects of narcotics such as sedation, N&V, dry mouth, constipation.
3. Assess the effects of pain on quality of life and provide support.
4. Provide distraction through participation in activities.
5. Report unrelieved pain to physician.
6. Alter plan of care until pain is relieved.

Care Planning: Morning Care

- Excellent article reviewing strategies for approaches to morning care to reduce pain
- Talerico, KA, Miller, LL, Swafford, K, Rader, J, Sloane, PD, Hiatt, SO (2006) Psychosocial approaches to prevent and minimize pain in people with dementia during morning care. *Alzheimer's Care Quarterly*, 7 (3), 163-174.

Recommendations

- Develop consistent pain assessment plan
- Document pain score as a vital sign
- Communicate patient's preferred assessment tool or term for pain
- Reassess uncontrolled pain frequently
- Reassess controlled pain at least weekly in long term care facilities
