



BACKGROUND AND SIGNIFICANCE

- ❖ Accurate pain assessment is essential for adequate pain management and patients with dementia pose an even greater challenge for completing this task
- ❖ Self-report of pain is currently the gold standard, however, with progressive cognitive decline self-report may not always be reliable
- ❖ Untreated pain can delay healing, disturb sleep and activity patterns, reduce function, reduce quality of life, and prolong hospitalizations
- ❖ Dementia is projected to affect 75.6 million people worldwide in the year 2030 and almost triple in the year 2050 to 135.5 million (WHO, 2017)
- ❖ Based on the above figures, it is essential that healthcare staff are equipped with the knowledge and skills to care for these patients
- ❖ The best approach to pain assessment is to evaluate it with the most appropriate scale



PURPOSE

The purpose of this integrative literature review is to analyze the various types of pain assessment tools used with patients with dementia 65 years and older. This review will evaluate the benefits and limitations of each pain assessment tool and its implications for future healthcare practice, education, policy, and research.



METHOD

- ❖ Integrated literature review (Whittemore & Knaf, 2005)
- ❖ Comprehensive search of OVID Medline Plus and EBSCOhost CINAHL: "pain", "pain assessment", "pain measurement", "pain scale", and "dementia"

Inclusion Criteria: 6 out of 92 articles met the inclusion criteria

- ❖ Older adults 65 years and older with a diagnosis of dementia
- ❖ Study was reported in English
- ❖ Articles were research based
- ❖ Articles conducted in the United States and European countries

Exclusion Criteria:

- ❖ Articles that included various forms and causes of cognitive impairment other than dementia
- ❖ Studies that included subjects younger than 65 years
- ❖ Studies that were not research based determined by the hierarchy of evidence

SYNTHESIS OF LITERATURE

AUTHOR	FINDINGS	IMPLICATIONS FOR NURSING
Ersek et al., (2010) Observational Pain Scale: CPNI PAINAD	<ul style="list-style-type: none"> Both the CNPI and PAINAD should be used cautiously in research and clinical practice These two instruments should not be used as the sole instrument for pain assessment as both of these tools underestimated the patient's pain 	<ul style="list-style-type: none"> Supports the use of a multidimensional pain assessment program
Pautex et al., (2006) Self-Report Pain Scale: FPS VRS HVAS	<ul style="list-style-type: none"> The ability to comprehend the use of a pain scale was related to the degree of cognitive impairment Self report pain scales can be reliably performed in a large proportion of older adults with severe dementia 	<ul style="list-style-type: none"> Pain was found to be mainly musculoskeletal in origin Approximately half of the participants reported pain and about 1/3 were not receiving any analgesics supporting that pain is under treated in this population, highlighting the significance of adequate pain assessments to identify pain Routine use of observational scales is not supported for patients with severe dementia
Pautex et al., (2005) Self-Report Pain Scale: VVAS HVAS FPS VRS Observational Pain Scale: Doloplus-2	<ul style="list-style-type: none"> Among the participants reporting pain, the observational pain scale underestimated severity compared to all four self-assessment scales Pain self-assessment scales possess high test-retest and interrater reliability in patients with dementia compared to the observational pain tool. 	<ul style="list-style-type: none"> 47% of participants reported pain when asked directly however 24% of these cases were receiving no analgesics Pain was musculoskeletal in origin in 75% of the cases Observational scales should be reserved for those patients who have demonstrated an inability to complete a self-assessment
Chan et al., (2014) Observational Pain Scale: PACSLAC PACSLAC-II NOPPAIN	<ul style="list-style-type: none"> Satisfactory internal consistency in pain conditions for movement exacerbated pain and needle injection PACSLAC and PACSLAC-II contributed to better pain assessments for patients with dementia PACSLAC-II was able to discriminate between pain and non-pain related states 	<ul style="list-style-type: none"> Many of the observational tools available consist of items that overlap with other conditions such as delirium and depression Educating staff on these overlapping symptoms or behaviors will assist them in performing more efficient pain assessments and increase pain detection
Husebo et al., (2014) Observational Pain Scale: MOBID-2	<ul style="list-style-type: none"> Results supported that the MOBID-2 pain scale is responsive to a decrease in pain Test-retest reliability was less favorable for the MOBID-2 	<ul style="list-style-type: none"> Emphasis on improved pain management in patients with dementia is the ability of a pain tool to capture the effect of pain treatment over time. Implementing a systematic pain management regimen resulted in a reduction of agitation and aggression
Jordan et al., (2011) Observational Pain Scale: PAINAD DisDAT	<ul style="list-style-type: none"> Significant improvement in pain scores was observed in both the PAINAD and DisDAT after a pain management protocol was implemented Support the use of both observational pain scales to detect pain and to assess the effectiveness of treatment PAINAD also detects distress not caused by pain 	<ul style="list-style-type: none"> Majority of participants reported musculoskeletal pain Pain assessment tools can be helpful in monitoring pain, but the assessment of pain is a task that requires knowledge and skill

RESULTS

- ❖ Self-report of pain remains the gold standard
- ❖ Self-assessment pain scales should be attempted for all patients with dementia who demonstrate comprehension of the scale
- ❖ Observational scales should not be routinely used for pain assessment



IMPLICATIONS & CONCLUSIONS

IMPLICATIONS TO PRACTICE

- ❖ Pain assessment should be individualized, multidimensional, and multidisciplinary
- ❖ Staff need to be properly trained on the use of the pain assessment scales used in their facility
- ❖ Self-report pain assessment scales should be attempted in patients with dementia and observational pain assessment scales should not be routinely used

IMPLICATIONS TO EDUCATION

- ❖ Health care staff should be provided educational materials on the types and causes of dementia
- ❖ Understanding the disease process will help healthcare staff in choosing the appropriate pain assessment tool
- ❖ All healthcare staff should receive mandatory education on pain assessment skills and the use of the tool being implemented

IMPLICATIONS TO RESEARCH

- ❖ Ongoing evaluations of pain assessment tools is essential to ensure their use is appropriate, adequate, and effective
- ❖ Further research and testing of pain assessment tools involving a culturally diverse population in a variety of clinical settings is needed

IMPLICATIONS TO HEALTHCARE POLICY

- ❖ A systematic pain management protocol should be implemented for patients with a diagnosis of dementia



REFERENCES

- American Geriatric Society (AGS). (2017). *Pain management in the elderly*. Retrieved from <http://www.americangeriatrics.org/gsr/anesthesiology/pain>
- Chan, S., Hadjistavropoulos, T., Williams, J., & Lints-Martindale, A. (2014). Evidence-based development and initial validation of the pain assessment checklist for seniors with limited ability to communicate-II (PACSLAC-II). *Clinical Journal of Pain, 30*, 816-824.
- Ersek, M., Herr, K., Neradilek, M.B., Buck, H.G., & Black, B. (2010). Comparing psychometric properties of the checklist of nonverbal pain behaviors (CNPI) and the pain assessment in advanced Dementia (PAIN-AD) instruments. *Pain Medicine, 11*(3), 394-405.
- Husebo, B.S. & Strand, L.L. (2014). The MOBID-2 pain scale: Reliability and responsiveness to pain in patients with dementia. *European Journal of Pain, 18*, 1419-1430.
- Jordan, A., Regnard, C., O'Brien, J.T., & Hughes, J. (2011). Pain and distress in advanced dementia: Choosing the right tools for the job. *Palliative Medicine, 26*(7), 873-878.
- Pautex, S., Herrmann, F., Le Lous, P., Fabjan, M., Michel, J.P., & Gold, G. (2005). Feasibility and reliability of four pain self-assessment scales and correlation with an observational rating scale in hospitalized elderly demented patients. *Journal of Gerontology, 60*(4), 524-529.
- Pautex, S., Michon, A., Guedira, M., Emond, H., Le Lous, P., Samaras D., & Michel, J.P. (2006). Pain in severe dementia: Self-assessment or observational scales? *Journal of American Geriatrics Society, 54*, 1040-1045.
- Whittemore, R. & Knaf, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing 52*(5), 546-553.
- World Health Organization (WHO). (2017). *Dementia*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs362/en/>