Nurse Practitioner Adherence with National Guidelines: Persistent Pain in Older Adults

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Preventing Needless Pain

Older Adults
Outline for Defense

1. Statement of the Problem
2. Framework/Literature Review
3. Methods
4. Results
5. Implications
The purpose of this study was to describe nurse practitioners’ (NPs) knowledge of and adherence to national practice guidelines on the pharmacological management of persistent pain in older adults.

The study compared nurse practitioners’ knowledge and adherence related to recommendations from the AGS (2009) guideline titled *Pharmacological Management of Persistent Pain in Older Persons.*
Diffusion of Innovation
E. Rogers, 2003

Knowledge → Persuasion → Decision → Implementation → Confirmation

Communication Channels

Adoption → Maintenance
Later Adoption → Discontinuous
Continued Rejection

Rejection
Literature Review

GAPS

Uniformed Education Requirements

NP Knowledge & Adherence to Practice Guidelines

NP Prescribing Patterns

Older Adults
- Untreated – Under-treated
- NSAIDs/Cox2s
- Opioids
- Addiction Risk
- Opioids Fears

NPs
- Opioid Risks
- NP Knowledge
- Management Practices
Methods

- **Design**
  - Cross-Sectional Descriptive Correlational Design

- **Sample**
  - Convenience – AANP 26th Conference
  - Las Vegas, NV – June 2011

- **Instruments**
  - Demographic Questionnaire
  - Survey on Knowledge of & Adherence to
Research Question 1

What is the knowledge of nurse practitioners on the prescribing and/or management of analgesia for the treatment of moderate to severe persistent pain in older adults?

Factor 1: Knowledge of Persistent Pain Management in Older Adults. Number of Items = 6, Range 6 to 30.

Research Question 2

Are nurse practitioners’ knowledge and adherence on the prescribing and/or management of analgesia for the treatment of moderate to severe persistent pain in older adults consistent with the recommendations from the AGS (2009) guideline on the *Pharmacological Management of Persistent Pain in Older Persons*?

Factor 2: Adherence with National Guidelines.
Number of Items = 8, Range 8 to 40.

Pearson’s product moment correlations
$t$-test to compare group means
Sample Characteristics

Career Experience

Number of Participants

- > 15 yrs
- 12 - 15 yrs
- 9 - 12 yrs
- 6 - 9 yrs
- 3 - 6 yrs
- 0 - 3 yrs

Gero Exp.
NP Exp.
RN Exp.
2010-2011 AANP Practice Survey (N=13,562)
93.5% Female
50.8 years
89.6 Masters
48.2% FNP
Sample Characteristics

National Certification

- FNP: 68.6% (n = 295)
- ANP: 25.1% (n = 108)
- ACNP: 5.8% (n = 25)
- GNP: 3.7% (n = 16)
Sample Characteristics

Working with Older Adults

- 50% or more of practice is with older adults
- 20 or more hours per week working with older adults

50.9% (n = 219) vs. 46% (n = 198)
Persistent Pain
Prescribing Patterns of Analgesics

Participants

Percent Ranges

0 - 24%  25 - 49%  50 - 74%  75 - 100%

NSAIDs
Opioids
Persistent Pain

Pain Education

Celebrate Pain in Older Adults: 34%
Graduate Ed - Pain: 32%
Persistent Pain

Prescribed 50% or More Times

Number of NPs

Analgesic Class

NSAIDS & Cox-2

Opioids
Education

t-test

The knowledge scores for NPs with pain management education (M = 18.45, SD = 2.66) and NPs without pain management education (M = 17.57, SD = 3.82); $t(410) = 1.88$, $p = .237$. (NS)

The adherence scores for NPs with pain management education (M = 28.59, SD = 3.31) and NPs without pain management education (M = 27.18, SD = 3.30); $t(410) = 4.03$, $p = .000$. (S)
The risk for opioid addiction in older adults is similar to the risk for opioid addiction in younger populations.*

Cox-2 selective inhibitors are superior to nonselective NSAIDs due primarily to their low gastrointestinal adverse effects.*

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<td>221</td>
<td>(51.4%)</td>
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<td>237</td>
<td>(55.1%)</td>
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Guideline Adherence

- NSAIDs should be avoided in older adults with current active chronic renal disease and heart failure.

- Older adults taking nonselective NSAIDs should use a proton pump inhibitor or misoprostol for gastrointestinal protection.

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<td>359 (83.5%)</td>
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<td>360 (83.7%)</td>
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Nonselective NSAIDs and Cox-2 selective inhibitors may be considered rarely, and with extreme caution, in highly selected older adults with persistent pain.

NSAIDs and Cox-2 selective inhibitors should be considered one of the first class of medications selected in treating persistent pain in older adults.*
Guideline Adherence

Acetaminophen should be considered as initial and ongoing treatment of persistent pain in older adults, particularly for long-term analgesia.

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<th>Opioid preparations should be considered in the treatment of moderate to severe persistent pain management in older adults.</th>
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<td>285 (66.3)</td>
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<td>313 (72.8)</td>
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Due to risk associated with opioid analgesic use for older adults with persistent pain, it is recommended that opioids be given on an “as needed” basis instead of routinely around the clock dosing.*

Screening for risk of opioid misuse or addiction is commonly used in my practice with older adults treated with opioid therapy.

| 191 (45.0%) |
| 199 (47.0%) |
Guideline Adherence

Opioid preparations should be considered in the treatment of moderate to severe persistent pain management in older adults.

313 (72.8%)
Limitations

• Convenience sample of NPs attending a professional conference.

• NPs who attend conferences may be more highly motivated and up-to-date on current evidence and practices than the general NP population.

• The survey in this study used to measure knowledge and adherence was developed by the researcher.
Implications

NPs must be competent practitioners and knowledgeable of current evidence on persistent pain management to ensure the efficacious and safe use of analgesics with their older patients.

The process of adopting guideline recommendations can be accelerated using the diffusion of innovation approach.
Implications

NP graduate education should include more concentrated, targeted prescribing education with analgesic use in older adults, such as NSAIDs and opioids.

NPs whose practices include a high percentage of older adults may benefit from clinical practicum experiences with pain management providers.
Implications

Continuing education should focus on the competency of the evolving evidence of analgesics with older adults.

Education programs which include the most current evidence and critical reviews of applicable guidelines would aid NPs with decisions on adopting current guideline recommendations.
Further Study

• Larger, random sample.

• Compare NPs with Physicians and Physician Assistants.

• Refine the survey instrument.

• Education strategies.
DEKUJI

THANK YOU