Perceived Health Status of Elders Treated with Opioids for Persistent Nonmalignant Pain

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Conflict of Interest Disclosure

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Author Conflict of Interest
• L, Simons, No Conflict of Interest

Learner Objectives
• The learner will be able to comprehend the importance of opioid therapy for persistent pain in the elderly.
• The Learner will be able to analyze the research project.
Background

- Pain is a prevalent issue

- Several negative consequences of unmanaged pain that impact health
Pertinent Literature

• Benefits of Opioids

• Standards of Care

• Elderly as a special population
Pertinent Literature

• Provider Issues

• Patient Issues

• Key Message
  • Opioids are rarely used as a long term treatment option for the elderly
The need to improve persistent pain management in the elderly is an important national concern.
Purpose

- To explore the relationship between opioid use and perceived health status in older adults aged 65–84 with persistent nonmalignant pain.
SPECIFIC AIMS

- Evaluate the association between persistent nonmalignant pain treated with opioids with perceived pain intensity, perceived health status, and functionality in older adults aged 65–84.

- Describe the association of gender, ethnicity, smoking behavior, and depressive symptoms on pain perception, health status and functionality.
Study Design

- Cross-sectional correlational design
Sample: Criteria

- Ages 65–84 years
- Treatment at pain center
- Opioid therapy for 6 months
- English speaking
- Living independently
- Cognitive status: SPMSQ > 5*
- No diagnosis of cancer

*Screened at time of appointment for interview
Sample: Recruitment

- Recruitment with flyers in office setting
- Mailed letters to patients meeting age criteria who had an office visit in last 6 months
- Follow up phone calls
Procedures/Data Collection

- Scheduled appointment

- Semi Structured Interview
  - Consent
  - Screening
  - Data Collection via Survey tool

- With consent, extraction of relevant clinical data from medical record
  - Pain management medications
  - Comorbid conditions/Medical History
Measures

- Independent Variable
  - Opioid use

- Dependent Variables
  - Pain intensity: NPS
  - Health Status: SF-12
  - Functionality: CDC Healthy Days – Activity Limitation Module

Short Acting Opioid (SAO)
Short Acting Opioid Combination (SAOc)
Long Acting Opioid (LAO)

Numeric Pain Scale
Physical and Mental Health
Covariates

- Depression: Short Form Geriatric Depression scale
- Ethnicity
- Smoking
- Alcohol use

Items on Survey
Data Analysis

- Descriptive measures
  - Frequencies
  - Means with standard deviations
  - SF–12: PCS, MCS

- Pearson $r$ correlations
  - Variables of interest
Sample (N = 31)

- 23 Females (74%) and 8 males (26%)
- Mean age $75 \pm 7.1$ years
- Primarily Caucasian (97%; n= 30) with one African American participant
Sample Characteristics

- **Relationship status**
  - Married (55%; n=17)
  - Widowed (23%; n=7)
  - Divorced (23%; n=5)
  - Single (3%; n=1)
  - Partner (3%; n=1)

- **Education**
  - BA degree or higher (19%; n=6)
  - College, AD or Technical (39%; n=12)
  - HS graduate (42%; n=13)
Clinical Characteristics

- **Smoking History**
  - Never (35%; n=11)
  - Former (52%; n=16)
  - Current (13%; n=4)

- **Alcohol (per week)**
  - None (81%; n=25)
  - 3–5 (16%; n=5)
  - >8 (3%; n=1)
Comorbid Conditions

Number of conditions: 2.19 ± 1.0

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>Number</th>
<th>Percent</th>
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<tbody>
<tr>
<td>OA</td>
<td>28</td>
<td>90.3%</td>
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<tr>
<td>HTN</td>
<td>18</td>
<td>58%</td>
</tr>
<tr>
<td>DM</td>
<td>11</td>
<td>35.4%</td>
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<tr>
<td>Hypothyroid</td>
<td>3</td>
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<tr>
<td>PA</td>
<td>2</td>
<td>6.4%</td>
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<tr>
<td>CVA/TIA</td>
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<td>6.4%</td>
</tr>
<tr>
<td>MI</td>
<td>2</td>
<td>6.4%</td>
</tr>
<tr>
<td>GI</td>
<td>2</td>
<td>6.4%</td>
</tr>
<tr>
<td>RA</td>
<td>1</td>
<td>3%</td>
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Covariate: Geriatric Depression

- Mean GDS score: $3.74 \pm 3.4$
  - Indicates no depression
  - Categorized as depressed or not, 6 subjects (19%) had scores that indicate depression
Pain Management

- Number of Opioid Medications
  - 1 product (84%; n=26) 2 products (16%; n=5)

- Types of Opioids: Most on a SAO combination product

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<tbody>
<tr>
<td>SAO</td>
<td>N=1; 3%</td>
<td>N=0; 0%</td>
</tr>
<tr>
<td>SAOc</td>
<td>N=27; 87.1%</td>
<td>N=2; 6.4%</td>
</tr>
<tr>
<td>LAO</td>
<td>N=3; 10%</td>
<td>N=0; 0%</td>
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</table>
Outcome Variables

- **Pain**
  - Mean pain intensity scores: $4.0 \pm 2.5$
  - Moderate pain (4–6)

- **Health Status**
  - Mental component score (MCS):
    - $50.4 \pm 12.0$
  - Physical component score (PCS):
    - $34.2 \pm 12.0$
Functionality: CDC Activity Module

- **Activity Limitation in ADL**
  - Yes (77%; n=24)
  - No (20%; n=6)
  - Not sure (3%; n=1)

- **Major Impairment:** 80.1% reported a type of musculoskeletal problem as the issue:
  - OA, back or neck problem, bone fx, RA
Functionality: CDC Activity Module

- Help with Personal Care
  - Yes (13%; n=4)
  - No (87%; n=27)

- Help with Routine Needs
  - Yes (29%; n=9)
  - No (71%; n=22)
Correlates

• **Pain**
  - GDS positively associated with pain
  - PCS negatively related to pain scores
  - MCS & perceived pain: no relationship

• **Health Status**
  - MCS: negative association with smoking behavior, GDS
  - PCS: negative association with #comorbidities, GDS
Key Messages/Conclusions

- OA and other musculoskeletal concerns are sources of chronic pain in the elderly
  - Growing importance with the aging US population

- Opioid therapy provides pain control in elders

- Opioid therapy supports functional status among elders
  - While 77% reported activity limitation, 87% had no need for assistance with personal care needs and 71% reported no need for help with routine care

- Data suggests functional ability can be maintained with opioid therapy to manage pain.
Practice and Policy Implications

- Opioid therapy for chronic pain in elders provides effective pain control and supports functional status in elders

- Engagement of patients and providers to consider opioid therapy for chronic pain management in this population
  - National Pain Guidelines support
  - Transfer best practices from pain management centers to primary care and long term care
Practice Implications

- Assessment of Functional Status is essential in care of elders in management of pain in the context of chronic conditions

- Need validated measures of functional status for use in elder care
  - Most are nominal level tools

- Depression screening
Limitations

- Cross-sectional design
- Small sample size
- Primarily female/Caucasian
- Time of treatment
Future Scholarship

- Development of validated measures of functional assessment of elders with chronic pain.

- Prospective studies with larger, more diverse study populations and well validated measures of functionality.

- Guideline development to support use of opioid therapy in elders in primary care practice.
Acknowledgements

- My dad, Gordon John Hodges to whom this project is dedicated
References


OPTUMInsight, 2012.


QUESTIONS?