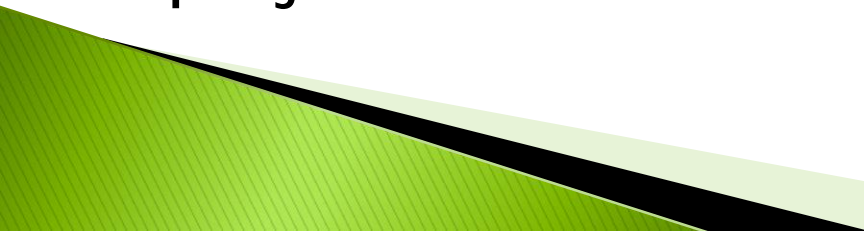# Perceived Health Status of Elders Treated with Opioids for Persistent Nonmalignant Pain

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Conflict of Interest Disclosure

- Leslie E. Simons
- Pain Management Center of Lansing, Anesthesia & Pain Management Consultants, Lansing, Michigan
- 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

Significance

► 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   **Items on Survey**
- Alcohol use

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 $\pm$ 1.0

CONDITION	Number	Percent
OA	28	90.3%
HTN	18	58%
DM	11	35.4%
Hypothyroid	3	9.6%
PA	2	6.4%
CVA/TIA	2	6.4%
MI	2	6.4%
GI	2	6.4%
RA	1	3%

Covariate: Geriatric Depression

- Mean GDS score: 3.74 ± 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

	1	2
SAO	N=1; 3%	N=0; 0%
SAOc	N=27; 87.1%	N=2; 6.4%
LAO	N=3; 10%	N=0; 0%

Outcome Variables

- **Pain**
  - Mean pain intensity scores: 4.0 ± 2.5
  - Moderate pain (4-6)

- **Health Status**
  - Mental component score (MCS):
  - 50.4 ± 12.0
  - Physical component score (PCS):
  - 34.2 ± 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)
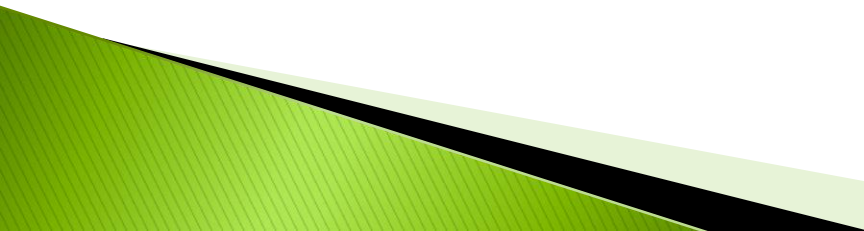 - **No**   (71%; n=22)

Correlates

- ## Pain

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

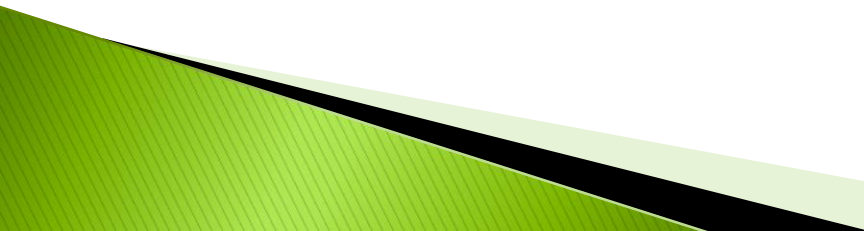- ## Health Status

  - 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

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