

---

Grace Peterson Nursing Research Colloquium

2017

---

Nov 17th, 10:00 AM - 11:30 AM

## **Opioid vs Antidepressant Efficacy in Treatment of Comorbid Chronic Pain and Depression in Older Adults: An Integrative Literature Review**

Elizabeth Swanson  
ella\_swanson01@yahoo.com

Follow this and additional works at: <https://via.library.depaul.edu/nursing-colloquium>



Part of the [Geriatric Nursing Commons](#)

---

Swanson, Elizabeth, "Opioid vs Antidepressant Efficacy in Treatment of Comorbid Chronic Pain and Depression in Older Adults: An Integrative Literature Review" (2017). *Grace Peterson Nursing Research Colloquium*. 55.

[https://via.library.depaul.edu/nursing-colloquium/2017/Fall\\_2017/55](https://via.library.depaul.edu/nursing-colloquium/2017/Fall_2017/55)

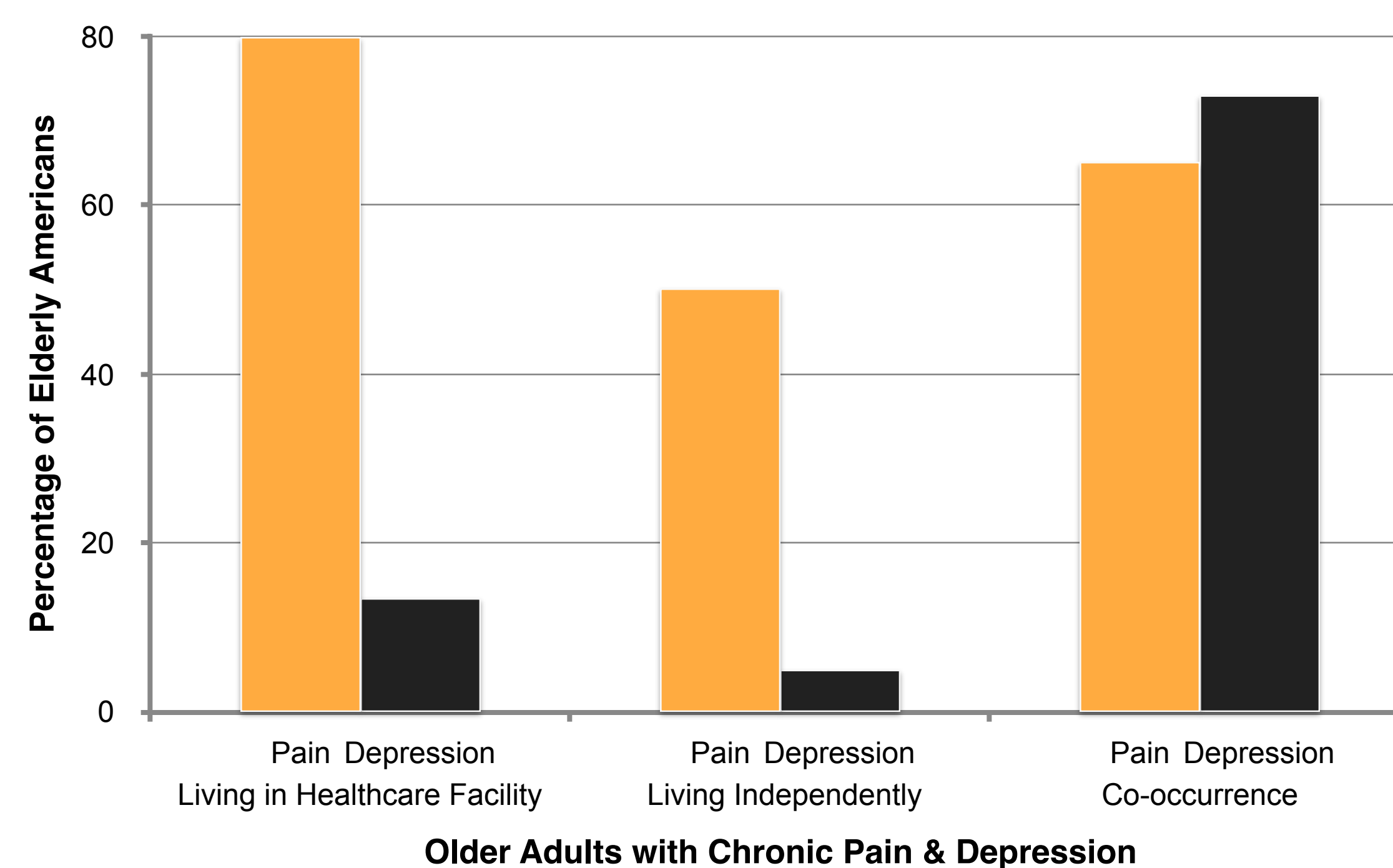
This Event is brought to you for free and open access by the School of Nursing at Via Sapientiae. It has been accepted for inclusion in Grace Peterson Nursing Research Colloquium by an authorized administrator of Via Sapientiae. For more information, please contact [digitalservices@depaul.edu](mailto:digitalservices@depaul.edu).



# Opioid vs Antidepressant Efficacy in Treatment of Comorbid Chronic Pain and Depression in Older Adults

Elizabeth Swanson — DePaul University — School of Nursing — 2017

## Background



### The Facts:

- Increased risk for pain and depression due to greater frequency of illness and rate of increasingly stressful life events encountered.
- Additionally, at increased risk for falls contributing further to occurrence of pain and depression due to possible functional disability.
- Coexistence of pain and depression may have additive effect on adverse health outcomes and treatment responsiveness leading to higher health care costs and increased risk for suicide.
- **Treatment options:** Pharmacological (NSAIDs, acetaminophen, COX-2 inhibitors, opioids, antidepressants), Non-pharmacological (relaxation therapy, acupuncture, massage, chiropractic, exercise, distraction techniques, transcutaneous electrical nerve stimulation)

## Objectives

• **Purpose:** compare the pharmacological treatment strategies of opioids vs antidepressants and explore their differences, similarities, and effectiveness for improving comorbid pain and depression in older adults

### • Research Questions:

1. Do opioids or antidepressants show greater efficacy in treating comorbid pain and depression in older adults?
2. What are the potential risks and benefits of treating comorbid pain and depression with opioids or antidepressants?
3. What are the potential risks and benefits of combining the use of both opioids and/or antidepressants to treat comorbid pain and depression in elderly?

## Methods

- Integrative literature review
- Whitmore and Knaff framework
- **Databases:** CINAHL, PsycInfo, and PubMed
- **Two separate searches:** (1) Opioids (2) Antidepressants
- **Exclusion Criteria:** Chronic Cancer pain

### Study Inclusion Criteria

Primary source
Full text article
Research article
English language
Publication dates 2006 through 2017
Mean age 55 or older
Treatment with either an opioid or antidepressant
Pain scale measurement
Depression scale measurement

## Results

- The literature demonstrated support for the use of antidepressants, duloxetine and venlafaxine, for treatment of comorbid chronic pain associated with musculoskeletal conditions, neuropathy, and arthritis in depressed older adults.
- The research also points to length of medication use and consistency of use as better predictors of positive outcome versus the superiority of a single antidepressant.
- Although the findings show transdermal opioids as safe and effective for older adults with comorbid chronic pain and depression, the use of oral opioids may actually increase rates of depression in those older adults using them for the pain.
- Signs of early improvement in pain and depression may be a reliable measure of progress to gauge continued response to treatment.
- The improvement of pain and depression occurs simultaneously but at different rates and may be affected by the cause of the chronic pain.
- The effective treatment of both chronic pain and depression can have other benefits such as increased functional ability, better general health, and increased quality of life.

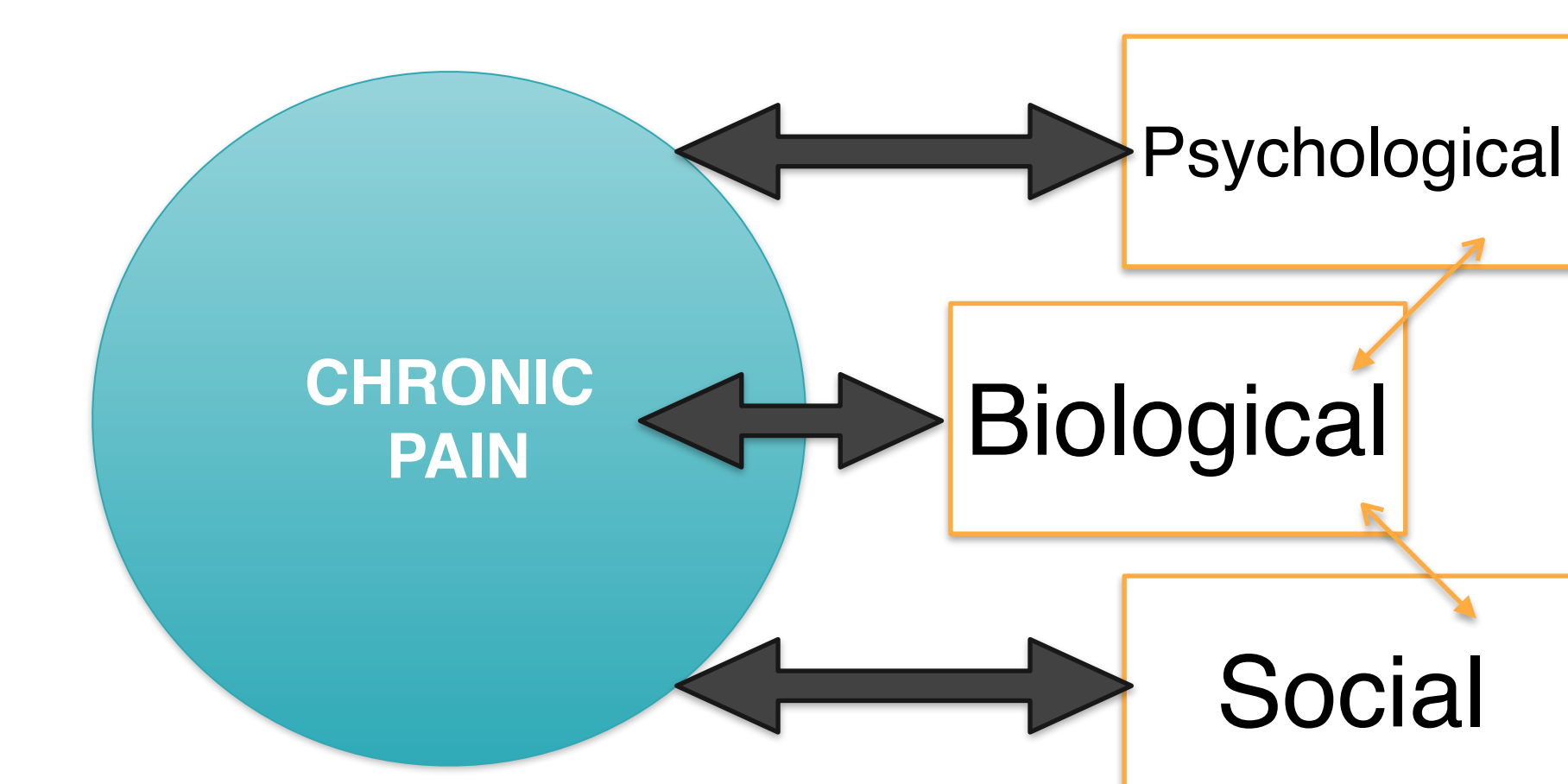


## Conclusion

- Antidepressants show greater efficacy in treating comorbid pain and depression in older adults. Regardless of which antidepressant was used, all had a positive effect of pain and depression. Whereas, opioids do show efficacy in some studies but also reveal a paradoxical effect by increasing the likelihood of developing depression when being used for pain.
- There are numerous potential risks to using both opioids and antidepressants as revealed by the research. Developing depression, drowsiness, dizziness, constipation, and nausea are the most common disadvantages for opioid use. However, transdermal route was associated with minimal adverse effects. Antidepressants have a much less severe adverse effect profile than opioids including, gastrointestinal upset, headache, insomnia, sexual dysfunction, and serotonin syndrome. These effects are known to be minimal and may even subside with continued use. Both drug classes may increase risk of falls in older adults.
- The review did not indicate research to demonstrate the efficacy of specifically combining the use of both opioids and antidepressants for comorbid chronic pain and depression. Although the combination may be beneficial in providing an additive effect for treatment, the potential for combined adverse effects from both medications is also a concern. Future research in this area is warranted.
- **Limitations:**
  - Lack of studies on exclusively older adult population
  - Lack of direct comparison studies and combination therapy studies
  - All studies allowed use of adjunct medications and/or non-pharmacological treatment methods

## Nursing Implications

- Greater understanding of treatment efficacy for prescribing by nurse practitioners.
- Enhance patient education on complexity of comorbid pain and depression and treatment options for older adults.
- Improve evidence-based practice for older adults with pain and depression to improve quality of life, decrease functional impairment, and increase overall health and life satisfaction for older adults.



## Acknowledgements

DePaul University School of Nursing. My husband, Kyle Swanson.  
**Faculty Advisors:** Barbara Harris PhD, RN, Kim Siarkowski Amer, PhD, RN