

Toward a Conceptual Framework of Opioid Use in Older Adults: Prescribing Patterns and Health Outcomes

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Introduction

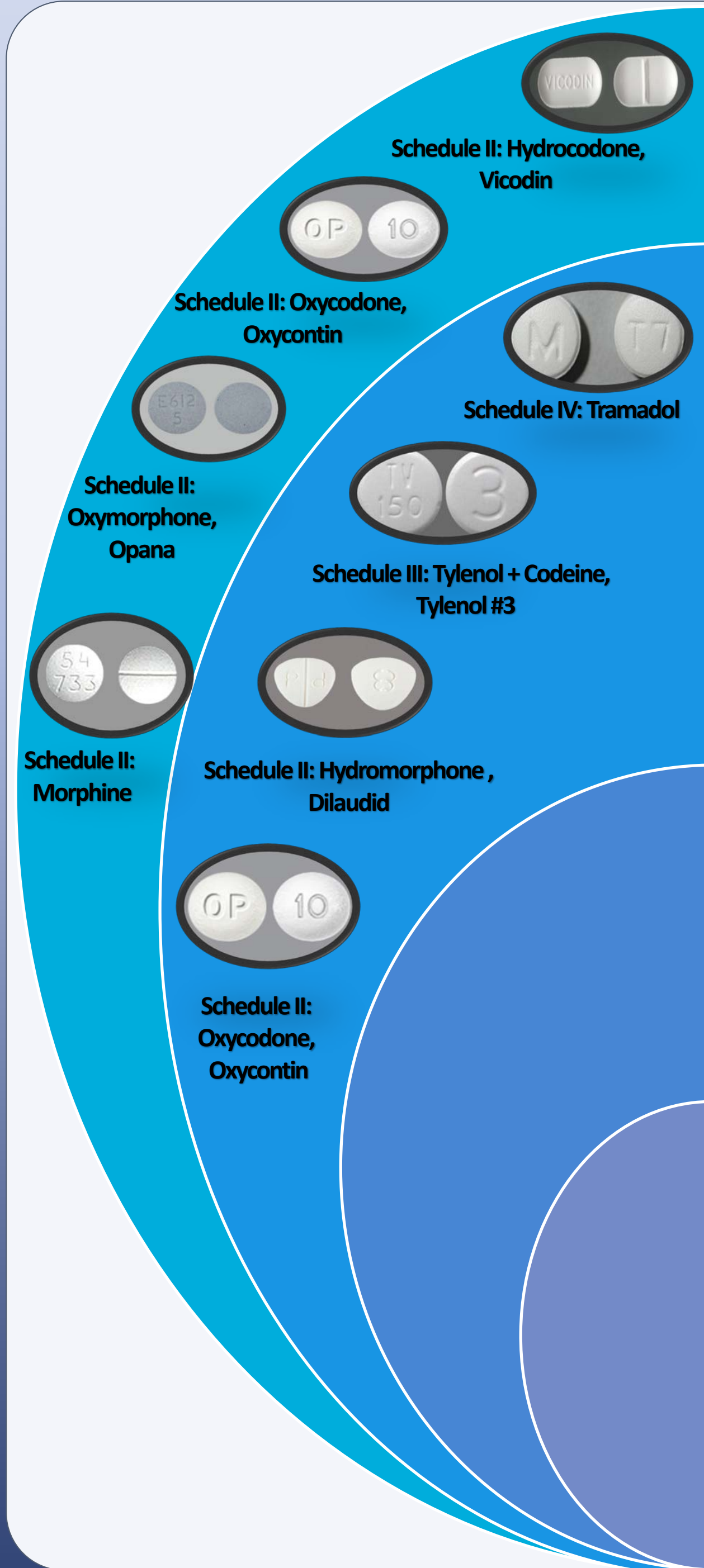
In 2015, 37.8% of the population, or 91.8 million noninstitutional adults in the U.S., used prescription opioids (Han et al., 2017). Among older adults, 14.4 million or 1 in 3 receive opioids. Many receive multiple refills and doses high enough to be considered dangerous for this age group.

Stereotypes, biases, and the aging physiology serve as barriers that prevent healthcare providers from recognizing opioid misuse or abuse in older adults. Many factors, however, contribute to opioid use, misuse, and abuse in older adults. Chronic pain, multimorbidity, and previous patterns of illicit and recreational drug use predispose the aging population for opioid misuse and abuse.

The purpose of this literature review was to raise awareness of opioid use, patient characteristics associated with abuse, and prescribing patterns among health care providers in order to promote safety, health, and quality of life in older adults.

Methods

Data from peer-reviewed journals, epidemiological databases, and expert opinion was used to examine the topic. A literature search focusing on opioid use among older adults was conducted. Search terms included opioid use, older adults, geriatric, elderly, late life, incidence, prevalence, consequences, and health outcomes. Databases included CINAHL, Medline, and PubMed. Search limits included documents within the past five years, English language, peer-reviewed journals, epidemiological data, and expert opinion. Fifty articles met the initial search criteria. Nineteen articles were ultimately used for the review of the literature.



Opioid Use Nationwide

- General Public: 91.8 million (37.8%) U.S. civilian, (Han et al., 2017)
 - ✓ *Most common opioids: Vicodin, Oxycontin, Opana, Morphine*
- Older adults: 14.4 million, 1 in 3 received opioids (U.S.OIG, 2017)
 - ✓ *Most common opioids: Tramadol, Tylenol #3, Dilaudid, Oxycodone*

Prescribing Patterns Among Providers

- Quantity/supply to patients: 1 in 10 → 3 month supply; 3.6 million → 6 month supply; 610,000 → 12 months+ supply
- 80% of prescriptions were Schedule II / III
- Multiple dosing: Community dwelling > LTC
- Prescriptions: Long term care (LTC) > Community (8.2% vs 4.2%)
- Dangerous prescribing patterns
 - ✓ 115,851 opioid prescribers > 401 with “questionable” prescribing > 81 APRN’s with questionable prescribing
- Increased prescribing: 4.62% in 2007 > 7.35% in 2012
- Prescribed for:
 - ✓ *Chronic & moderate to severe pain, non neuropathic, non cancer pain*
 - ✓ *For patients with COPD, insomnia, dyspnea, multiple sclerosis pain*
 - ✓ *Augmentation with another medication >> Increased ADE*

Patient Characteristics

- Predominantly female, white race, low income, prior hospitalizations, non-metro residence, lower education
- Poor physical / mental health
 - ✓ *Comorbidities: substance use disorder (SUD); rheumatoid arthritis, major depressive disorder*
- Opioids misuse most associated with chronic pain
- Diversion: 1+ providers, “prescriber shopping”; history of SUD, previous substance use

Outcomes of Opioid Use in Older Adults

- Death
 - ✓ *Accidental overdose (OD), Drug-drug interaction, adverse drug events*
 - ✓ *More likely to die from chronic illness or drug related causes*
 - ✓ *Opioids used for OD/suicide*
 - ✓ *Serious medical outcomes*
- Prolonged Opioid Use
 - ✓ *Increased ER/Acute care visits / stays*
 - ✓ *OD, addiction*
- OIC (Opioid induced constipation)
 - ✓ *Multiple sequelae, reduced QOL*
- Opioid misuse / abuse / addiction

Outcomes / Results

Opioid prescriptions have risen dramatically for those over age 65. In 2015, 1/3 of Medicare Part D recipients were prescribed opioid analgesics. Over 500,000 of these prescriptions were considered high to extremely high for an older adult. While pain relief is the most common reason for opioid use in older adults, they were also used in circumstances where safer, more appropriate options were feasible. Older opioid recipients tend to be white females. Other characteristics include low education & income, non-metropolitan residence, prior hospitalizations, and poor physical & mental health. The effects of the opioid use in older adults can be devastating; health sequelae include illness exacerbation, injury, addiction, and death.

Application to APRN Practice

- APRN’s must be knowledgeable about the prevalence and impact of opioid medication use in older adults.
- Complementary and alternative treatment options should be considered before prescribing opioid analgesics to older adults.

APRN Competencies

- **Leadership:** Assumes complex and advanced leadership roles to initiate and guide change.
- **Quality:** Uses best available evidence to continuously improve quality of clinical practice.
- **Independent Practice:** Demonstrates the highest level of accountability for professional practice. Practices independently managing previously diagnosed and undiagnosed patients.
 - * AACN supports APRN workforce development to address opioid use / misuse.