

The Hidden Opioid Abuse Problem: Geriatric Opioid Abuse, or is Grandpa Really a Junkie

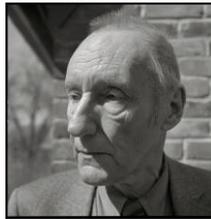
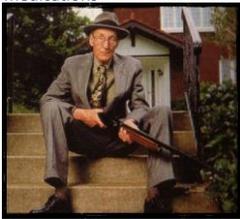
Ernest J Dole, PharmD, PhC, FASHP, BCPS
Clinical Pharmacist & Asso. Clinical Prof.
University of New Mexico Hospitals & College of Pharmacy
Albuquerque, NM



Learning Objectives

- At the end of this presentation, utilizing a case of an older patient on chronic opioid therapy (COT) with the comorbidity of geriatric opioid abuse (GOA) the participant will be able to
 - Discuss the common presenting signs & symptoms of GOA
 - Understand why GOA may be difficult to diagnose
 - Assess the impact of common comorbidities present in older patients on GOA

Case Study: WB is a 82 yo male who presents, with his daughter, to your ambulatory care clinic for routine evaluation and refill of his medications



Case Study: WB is a 82 yo male who presents, with his daughter, to your ambulatory care clinic for routine evaluation and refill of his medications

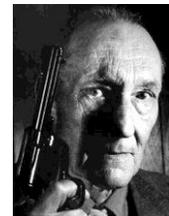
- CC:
 - ↑↑ pain, ↓ sleep, "memory"
- PMH:
 - Chronic pain: OA b/l hips & knees, DDD (L4-L5)
 - Depression
 - Anxiety
 - PTSD ; assault , 1987
 - T2DM
 - Osteoporosis
- FH:
 - Parents:
 - Both deceased; father from MI; mother from CVA, father divorced when patient was 11 yo
 - Divorced:
 - husband alcoholic, abusive
 - 2 daughters, 1 son:
 - both daughters w/ +PMH for tx for SUDs

Case Study : Continued

- Medications:
 - Buspirone 10mg tid
 - Cyclobenzaprine 10mg tid
 - Duloxetine 20mg bid
 - Metformin 500mg bid
 - Morphine 15mg q6h
 - Mirtazapine 15mg, #1-2 hs
 - Pregabalin 100mg tid
 - Ca 500mg tid
- VS:
 - BP: 155/80 Ht: 5'2"
 - HR: 100 bpm Wt: 105lb
 - R: 20 QTc: 480ms
- Lab
 - SCr: 1.4
 - LFTs: WNL
 - UDM: + morphine, hydromorphone
- Other Monitoring
 - PMP: appropriate for 28 day fill cycle
 - EHR Rx fill list show early fills for cyclobenzaprine, morphine, pregabalin

Case Study: Continued

- PE:
 - Well groomed, eye contact diverted at times
 - Affect is flat, somewhat engaged in conversation, cognition & memory is slow & she has impaired word search, patient is hypervigilant
 - States his pain is ↑↑, but cannot discern a specific pain driver
 - He is focused on his cyclobenzaprine, morphine & pregabalin
 - Motor & neuro exam at baseline



Pre-Test Question 1:
In the patient's case medication list, which medications are at risk for abuse

ashp Certification Resources

- A. Buspirone, Cyclobenzaprine
- B. Cyclobenzaprine, Duloxetine
- C. Duloxetine, Morphine
- D. Morphine, Pregabalin

Pretest Question 2: GOA is often underdiagnosed because

ashp Certification Resources

- A. Elderly patients do not abuse drugs
- B. Opioid abuse is a chronic disease of younger patients
- C. Providers rarely look for GOA
- D. Elderly patients rarely present to clinic impaired from GOA

Pretest Question 3: Which of the following screening tools for opioid abuse have been validated in an older population

ashp Certification Resources

- A. CAGE, ORT, AUDIT
- B. MAST, ASSIST, DARE
- C. None of the above
- D. All of the above

Pretest Question 4: Which screening tools have been recommended for screening for GAO?

ashp Certification Resources

- A. CAGE, MAST, AUDIT
- B. ORT, CAGE, MAST
- C. DIRE, ORT, CAGE
- D. DARE, DIRE, ORT

Oral extended-release

Pretest Question 5: Examples of system issues that bias against diagnosis of GAO

ashp Certification Resources

- A. Definition of older adult may vary, grandma deserves one last indulgence
- B. Large study sizes, multiple studies available
- C. A depth of provider education, GOA has been decreasing over time
- D. Most geriatric patients enter the rehab-treatment system via legal avenues, elder patient's families can't tell if grandma is abusing opioid medication

GOA: The Hidden Opioid Abuse Epidemic

ashp Certification Resources

- GOA is a hidden & difficult diagnosis secondary to:
 - System Issues:
 - Scope of the problem:
 - As “baby boomers” start turning 65 yo in 2011, 10,000 people will turn 65 yo daily & will continue at this rate for the next 20 years
 - All “boomers” will be ≥ 50 yo in 2020, ≥ 65 yo in 2030, & at this time nearly 20% of U.S. residents is expected to be 65 and older
 - ≥65 yo group is projected to ↑ to 88.5 million in 2050, more than doubling the number in 2008 (38.7 million)

Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. Am J Addict. 2010; 19: 515–522. doi:10.1111/j.1521-0995.2010.00960.x

Kuerbis A, Sacco P, Blazer DG, et al. Substance abuse among older adults. Clin Geriatr Med. 2014 August; 30(3): 639–654. doi:10.1016/j.cger.2014.04.008

Center for Substance Abuse Treatment. Substance Abuse Among Older Adults. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1998. (Treatment Improvement Protocols (TIP) Series, No. 26.) Available from: <https://www.ncbi.nlm.nih.gov/books/NB64419>

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- GOA is a hidden & difficult diagnosis secondary to:
 - System Issues:
 - Definition of "older adult" can be 50 yo, or 60 yo, instead of 65 yo due to ↓ in cognitive function, biological factors, psychological factors, and changes in social factors.
 - Small study sizes & heterogeneous populations

Taylor MH, Grossberg GT. The growing problem of illicit substance abuse in the elderly: a review. *Prim Care Companion CNS Disord.* 2012; 14: PCC.11r012300
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. *Am J Addict.* 2010; 19: 515–522. doi:10.1111/j.1521-0391.2010.00808.x.
Kuerbis A, Sacco P, Blazer DG, et al. Substance abuse among older adults. *Clin Geriatr Med.* 2014 August; 30(3): 629–654. doi:10.1016/j.cger.2014.04.008.

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- GOA is a hidden & difficult diagnosis secondary to:
 - System Issues:
 - Diagnostic criteria bias:
 - due to lack of child care responsibilities &/or retirement from work, older patients with GOA may not meet the criterion of a failure to fulfill major role obligations at work or home, as listed in the DSM-IV-TR
 - changes in pharmacokinetics/dynamics and physiology may appear to ↓ opioid tolerance in elderly persons, which will negate the DSM criteria for ↑ opioid tolerance

Patterson TL, Jeste JV. The potential impact of the baby-boom generation on substance abuse among elderly persons. *Psychiatric Services.* 1999; 50:1184–1188.
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. *Am J Addict.* 2010; 19: 515–522. doi:10.1111/j.1521-0391.2010.00808.x.

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- GOA is a hidden & difficult diagnosis secondary to:
 - System Issues:
 - Ageism & stereotyping
 - "grandma's one last indulgence"
 - "what difference does it make, she won't be around much longer"
 - Provider education
 - In a crowded curriculum geriatrics accounts for a fraction of that curriculum; opioid abuse far less
 - Short appointment time

Bardach SH, Rowles GD. Geriatric education in the health professions: are we making a difference. *The Gerontologist.* 2012;52:607-618
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. *Am J Addict.* 2010; 19: 515–522. doi:10.1111/j.1521-0391.2010.00808.x.
Kuerbis A, Sacco P, Blazer DG, et al. Substance abuse among older adults. *Clin Geriatr Med.* 2014 August; 30(3): 629–654. doi:10.1016/j.cger.2014.04.008.
Patterson TL, Jeste JV. The potential impact of the baby-boom generation on substance abuse among elderly persons. *Psychiatric Services.* 1999; 50:1184–1188.

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- Epidemiology
 - Prevalence of opioid use
 - ~ 6–9% of community-dwelling older adults use COT for CNCP
 - 70% of nursing home residents with CNCP were prescribed COT
 - in a community-based study of older adults with CNCP and a mean age of 82 years, 25% of participants reported using COT.

Naples JG, Galid WF, Hanlon JT. Managing pain in older adults: the role of opioid analgesics. *Clin Geriatr Med.* 2016 November; 32: 725–735. doi:10.1016/j.cger.2016.06.006.
Reid MC, Henderson CR, Papaleontiou M. Characteristics of older adults receiving opioids in primary care: treatment duration and outcome. *Pain Med.* 2010; 11: 1083–1071. doi:10.1111/j.1526-4637.2010.00883.x.

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- Epidemiology
 - Prevalence of opioid misuse
 - In 1 study only #4pts/12,000 patients prescribed morphine for self administration became addicted
 - Recently 1 study reported that 1.4% of adults ≥ 50 yo used prescription opioids nonmedically in the last year
 - SUD tx in 1992 for prescription opioids was 0.7% for ages 50–54 yo & ≥ 55 yo ; SUD tx in 2005 ↑ to 3.2% for ages 50–54 yo & 2.8% for ≥ 55 yo

Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. *Am J Addict.* 2010; 19: 515–522. doi:10.1111/j.1521-0391.2010.00808.x.
Center for Substance Abuse Treatment. Substance Abuse Among Older Adults. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1998. (Treatment Improvement Protocol (TIP) Series, No. 26.) Available from: <https://www.ncbi.nlm.nih.gov/books/NB464419>
Kuerbis A, Sacco P, Blazer DG, et al. Substance abuse among older adults. *Clin Geriatr Med.* 2014 August; 30(3): 629–654. doi:10.1016/j.cger.2014.04.008.

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- Demographic's of GOA may be changing
 - administrative data from New York State licensed drug treatment programs to examine overall age trends and characteristics of older adults in opioid treatment programs in New York City from 1996 to 2012
 - adults aged 50 and higher becoming the majority treatment population; the majority age group in opioid treatment were those 50–59, with large increases in those over the age of 60.
 - small but consistent change in the type of primary opioid used, with increased reporting of non-heroin and prescription opioid use since 1996.

Han B, Polydorou S, Blaum CS. Demographic trends of adults in New York city opioid treatment programs-an aging population. *Substance Use & Misuse.* 50:13, 1660-1667, DOI: 10.3109/10826084.2015.1027929

ashp
Certification
Resources

GOA: The Hidden Opioid Abuse Epidemic

- GOA is a hidden & difficult diagnosis secondary to:
 - Patient issues
 - Denial, stigma, lack of awareness
 - ↑ isolation; ↓ social support
 - Chronic pain is a natural part of aging
 - Effect of aging on physiologic systems
 - Dopaminergic & serotonergic receptor loss in prefrontal cortex and striatum; NMDA receptor loss in cortex, striatum, and hippocampus
 - Effect of comorbidities
 - GOA may present as: dementia, insomnia/sleep apnea, depression, anxiety

Guerreiro F. Guidance on opioids prescribing for the management of persistent non-cancer pain in older adults. World J Clin Cases. 2017;5: 73-81
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. Am J Addict. 2010; 19: 515–522. doi:10.1111/j.1521-0991.2010.00080.x
Kuerbis A, Sacco P, Blaazer DG, et al. Substance abuse among older adults. Clin Geriatr Med. 2014 August; 30(3): 629–654. doi:10.1016/j.cger.2014.04.008

ashp
Certification
Resources

Assessment of a Hidden Epidemic

- Presenting signs & symptoms
 - Have GOA on your radar screen
 - Changes in cognition, mood, memory, hygiene, nutrition, and sleep
 - ↑ in depression &/or anxiety
 - Call from concerned family member &/or friend
 - Changes in oxygen saturation at clinic visit

Center for Substance Abuse Treatment. Substance Abuse Among Older Adults. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1998. (Treatment Improvement Protocol (TIP) Series, No. 36.) Available from: <https://www.ncbi.nlm.nih.gov/books/NBK64419>
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. Am J Addict. 2010; 19: 515–522. doi:10.1111/j.1521-0991.2010.00080.x
Kuerbis A, Sacco P, Blaazer DG, et al. Substance abuse among older adults. Clin Geriatr Med. 2014 August; 30(3): 629–654. doi:10.1016/j.cger.2014.04.008.
Satre DD, Sterling SA, Mackin RS, et al. Patterns of alcohol and drug use among depressed older adults seeking outpatient psychiatric service. Am J Geriatr Psychiatry. 2011; 19: 695–703.

ashp
Certification
Resources

Assessment of a Hidden Epidemic

- Screening Tests
 - There are no validated screening questionnaires for opioid abuse in the elderly
 - Use of a combination of: CAGE or CAGE-AID, Michigan Alcoholism Screening Test-Geriatrics (MAST-G), and Alcohol Use Disorders Identification Test (AUDIT) has been recommended

Center for Substance Abuse Treatment. Substance Abuse Among Older Adults. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1998. (Treatment Improvement Protocol (TIP) Series, No. 26.) Available from: <https://www.ncbi.nlm.nih.gov/books/NBK64419>
Kalapatapu RK, Sullivan MA. Prescription use disorders in older adults. Am J Addict. 2010; 19: 515–522. doi:10.1111/j.1521-0991.2010.00080.x.
Satre DD, Sterling SA, Mackin RS, et al. Patterns of alcohol and drug use among depressed older adults seeking outpatient psychiatric service. Am J Geriatr Psychiatry. 2011; 19: 695–703.

ashp
Certification
Resources

GOA: Risk Factors

- Depression
- Less physically disabled
- Multiple medications
- PTSD
- +PMH of illicit drug use

Park J, Lavin R. Risk Factors Associated With Opioid Medication Misuse in Community-dwelling Older Adults With Chronic Pain. Clin J Pain. 2010;26:647–55.
Cochran G, Rosen D, McCarthy RM, et al. Risk factors for symptoms of prescription opioid misuse: do older adults differ from younger adult patients? J Geriatr Soc Work. 2017;12:1-15.

ashp
Certification
Resources

Assessment of a Hidden Epidemic

- Opioid Assessment Tools
 - Risk Assessment
 - Not validated in elderly
 - ORT, DIRE, SOAPP-R
 - Ongoing Assessment
 - Not validated in elderly
 - COMM, ABC, 5-Point Opiate Abuse Checklist

<https://www.opioidrisk.com/book/export/html/613>. Accessed September, 4, 2017

ashp
Certification
Resources

Assessment of a Hidden Epidemic

- Other tools
 - Use of PMP regulated by individual state's medical & pharmacy boards
 - Use of urine drug testing as mandated by individual state's medical & pharmacy boards

Key Take Aways

1. The number of elderly patients will increase in the coming years. It should be expected that the number of geriatric patients abusing &/or addicted to opioid medications should also increase. So, yes, Grandma could really be a junkie.

2. There are no validated tools to screen for GAO. SAMSHA recommends using: CAGE or CAGE-AID, Michigan Alcoholism Screening Test-Geriatrics (MAST-G), and Alcohol Use Disorders Identification Test (AUDIT) has been recommended.

Key Take Aways

- GOA is underdiagnosed because:
 - absence of validated diagnostic instruments in the geriatric population
 - the multitude of medical co-morbidities
 - nonspecific clinical presentation in the elderly
 - lack of geriatric provider training or awareness of substance abuse disorders
 - absence of published literature on nonalcohol substance use disorders in this population

Post-Test Question 1:
In the patient's case medication list, which medications are at risk for abuse

- A. Buspirone, Cyclobenzaprine
- B. Cyclobenzaprine, Duloxetine
- C. Duloxetine, Morphine
- D. Morphine, Pregabalin

Pretest Question 2: GOA is often underdiagnosed because

- Elderly patients do not abuse drugs
- Opioid abuse is a chronic disease of younger patients
- Providers rarely look for GOA
- Elderly patients rarely present to clinic impaired from GOA

Pretest Question 3: Which of the following screening tools for opioid abuse have been validated in an older population

- CAGE, ORT, AUDIT
- MAST, ASSIST, DARE
- None of the above
- All of the above

Pretest Question 4: Which screening tools have been recommended for screening for GOA

- CAGE, MAST, AUDIT
- ORT, CAGE, MAST
- DIRE, ORT, CAGE
- DARE, DIRE, ORT



Pretest Question 5: Examples of system issues that bias against diagnosis of GOA are

- Definition of older adult may vary, grandma deserves one last indulgence
- Large study sizes, multiple studies available
- A depth of provider education, GOA has been decreasing over time
- Most geriatric patients enter the rehab-treatment system via legal avenues, elder patient's families can't tell if grandma is abusing opioid medication