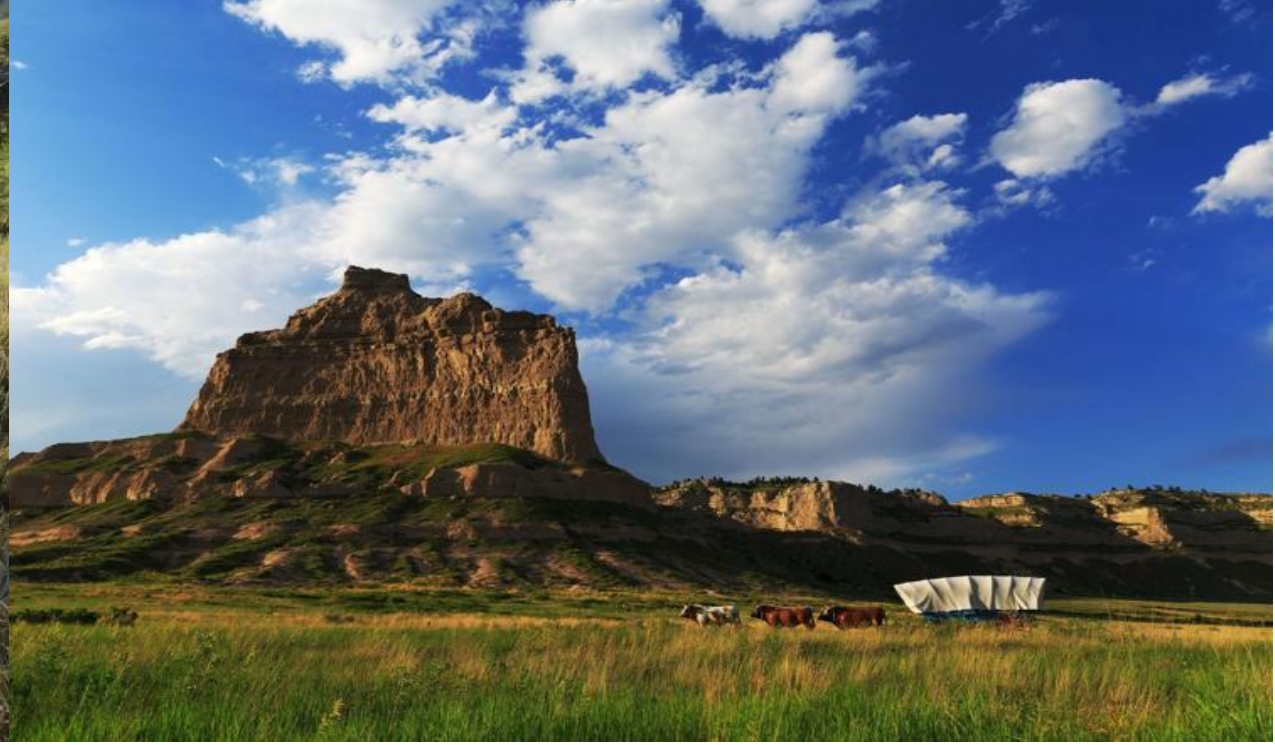
Hikers take in beauty of Chadron State Park. *Nebraska Tourism .*



Scotts Bluff National Monument. Ryan Soderlin/World-Herald

OLDER ADULTS AND OPIOIDS: CRISIS, RISKS, INTERVENTIONS

4th Annual Mental Health & Aging Conference 2020 — Omaha, NE

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Objectives

Participants will be able to:

- Explain the rationale for research on older adults and the opioid crisis
- Summarize relationship between waves in rise of opioid use and overdose deaths
- Describe predisposing risk factors in older adults related to opioid use
- Describe age-related changes in older adults that impact decision-making related to prescribing and use of opioids
- List commonly used opioids treating pain in older adults
- Describe benefits-risks analysis of commonly used opioids to treat older adults
- Describe relationship between opioid use, addiction, and warning signs
- Describe healthcare provider, clinician, and patient actions to reduce risk of an opioid crisis
- Explain methods to initiate difficult conversations with older adult patients

Older Adults (age 65 –older) & Strength in Numbers

- **Today:** 15% of population [just over 49 million]
  - ✓ fastest growing demographic in US today
- **2030**: 21% of population
  - ✓ all 'baby boomers' will be older than **65** [born 1946-1964]
- **2060**: nearly one **in** four [25%]
  - ✓ number of 85-plus will triple [fastest growing]
- **2019**: U.S. has most centenarians in the world – 80,000
- **2050**: Add a half million **centenarians**

https://www.google.com/search?q=seniors+over+age+65+by+2030&tbm=isch&source=iu&ictx=1&fir=U5FMRdtcZl2j1M%253A%252CzYLqeLA_WnrMvM%252C_&vet=1&usg=AI4-

http://sccommunityprofiles.org/census/sc_proj.html

Nebraskan Older Adults & Strength in Numbers

- Nebraska:
  - ✓2017: about 16% NE population was > 65 years of age
  - ✓2050: 22% of NE population will be 65 and older
  - ✓Oldest **centenarian** [#77 in US] Clara Huhn (Jan. 28, 1887 – Dec. 20, 2000) - 113 years, 327 days.

https://www.google.com/search?q=seniors+over+age+65+by+2030&tbm=isch&source=iu&ictx=1&fir=U5FMRdtcZl2j1M%253A%252CzYLqeLA_WnrMvM%252C_&vet=1&usg=AI4-

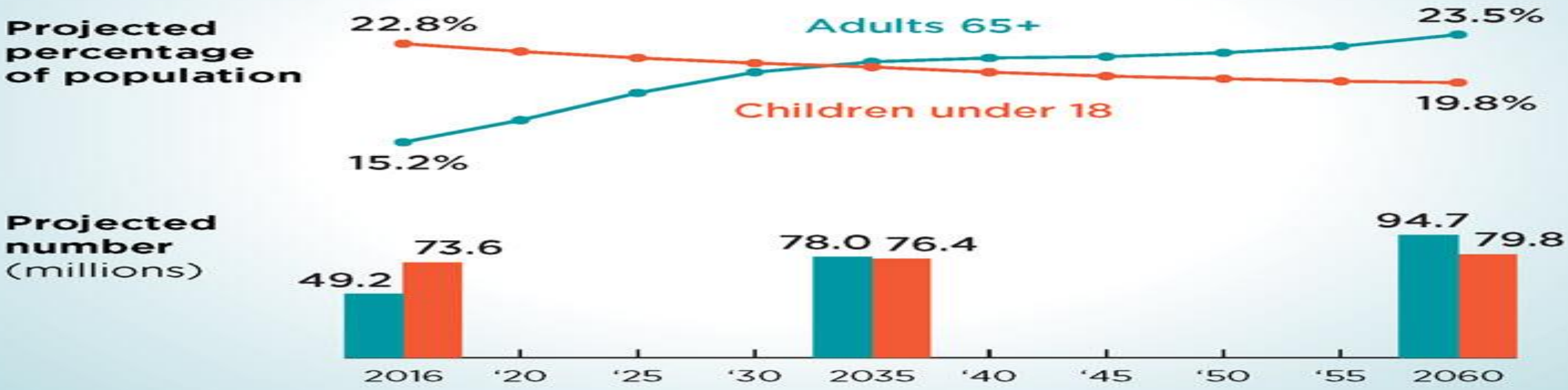
http://sccommunityprofiles.org/census/sc_proj.html

https://www.nehca.org/wp-content/uploads/Nebraskas-37-Supercentenarians-Validated-Among-Worlds-Longest-Lived.pdf

An Aging Nation

Projected Number of Children and Older Adults

For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2035



Note: 2016 data are estimates not projections.

United States Census Bureau

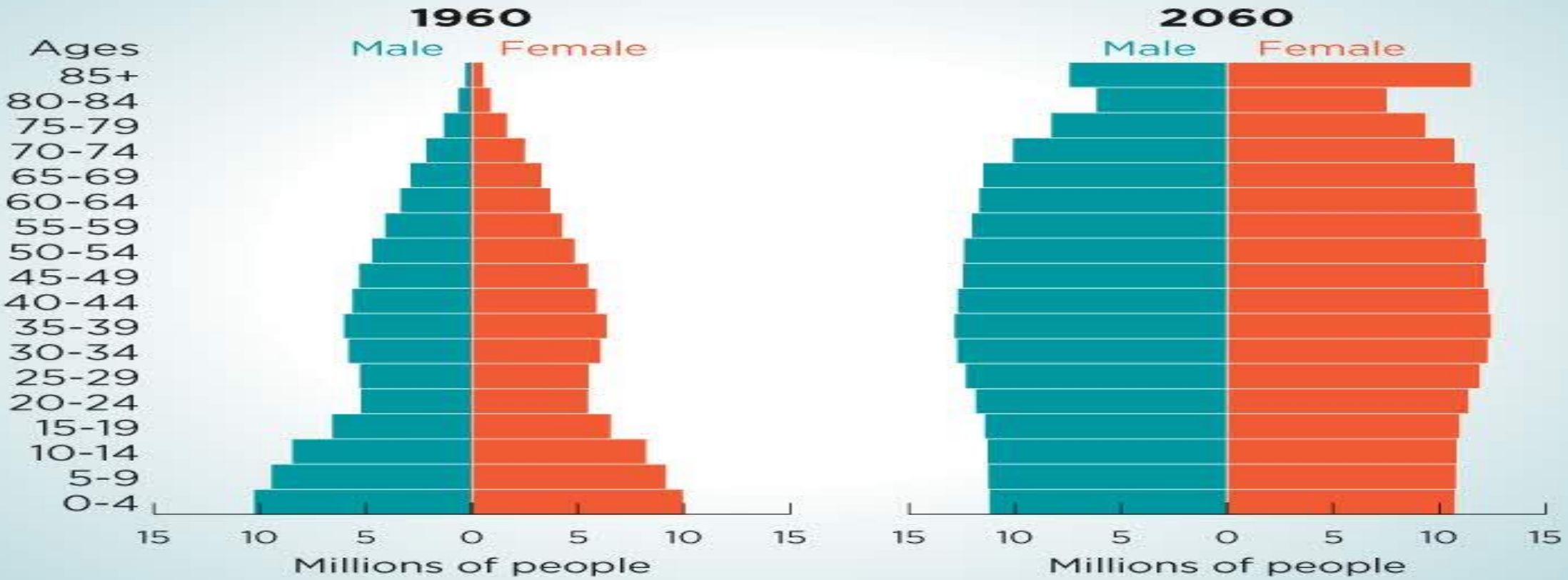
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html

ps://www.aarp.org/livable-communities/about/info-2018/aarp-livable-communities-preparing-for-an-aging-

From Pyramid to Pillar: A Century of Change

Population of the United States



United States® Census Bureau

U.S. Department of Commerce
U.S. CENSUS BUREAU
census.gov

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html

ps://www.aarp.org/livable-communities/about/info-2018/aarp-livable-communities-preparing-for-an-aging-nation.html

Rationale for Research: Older Adults, Pain & Opioids

- Older adults are caught in the national opioid use crisis

- **Pain** is #1 reason for seeking medical attention
- Chronic/persistent pain (3 – 6 months) is more prevalent
- Effects 25% - 50% of older adults
  - ✓60% report painful chronic conditions lasting more than one year
  - ✓45% - 80% nursing home patients report / indicate chronic pain
- Adverse effects of chronic pain

https://www.aginginplace.org/how-the-opioid-crisis-affects-the-elderly/

Nebraska Pain Management Guide, October 2017

Rationale for Research on Older Adults, Pain & Opioids

- More likely to be prescribed opioid treatment
- Opioid prescriptions increased by 900% between 1996 – 2010
- **2016**:
  - ✓1/3 of all Medicare Part D = at least one opioid prescription
  - ✓10% long-term (> 3 months) opioids
  - ✓Excessive high doses & extended period observed on 500,000 Medicaid beneficiaries with opioid prescriptions
- Misuse opioid prescriptions = 21% to 29%

https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-crisis

http://sccommunityprofiles.org/census/sc_proj.html

https://www.aginginplace.org/how-the-opioid-crisis-affects-the-elderly/

https://academic.oup.com/innovateage/article/3/1/igz002/5369972

Rationale for Research on Older Adults, Pain & Opioids

- **Age 50 & up**:

  - ✓35% misused opioid in past 30 days
  - ✓500% increase of hospitalization over past 20 years
  - ✓25% are long-term users of opioids
  - ✓Increased risk for developing opioid use disorder

http://sccommunityprofiles.org/census/sc_proj.html

Rationale for Research on Older Adults, Pain & Opioids

- **Average 70 year old**:

  - ✓3 comorbid medical conditions
  - ✓Takes at least 7 different medications
  - ✓Drug-drug and disease-drug interactions must be considered when prescribing opioids

http://sccommunityprofiles.org/census/sc_proj.html

Rationale for Research on Older Adults & Opioid Crisis

- Medications are slower leaving the body systems = severe side effects
- Emergency departments & hospitalization due to OD or complications:
  - ✓220% increase in ED visits: 11% in 2006; 44% in 2014
  - ✓nearly 6.4 opioid-related ED visits involving were occurring every hour in the United States in 2014
- Pain relief TX with Opioids:
  - ✓moderately effective for pain relief for periods of three months or less
  - ✓generally not effective for long-term use

https://www.psychiatrictimes.com/substance-use-disorder/wake-call-substance-abuse-among-older-adults

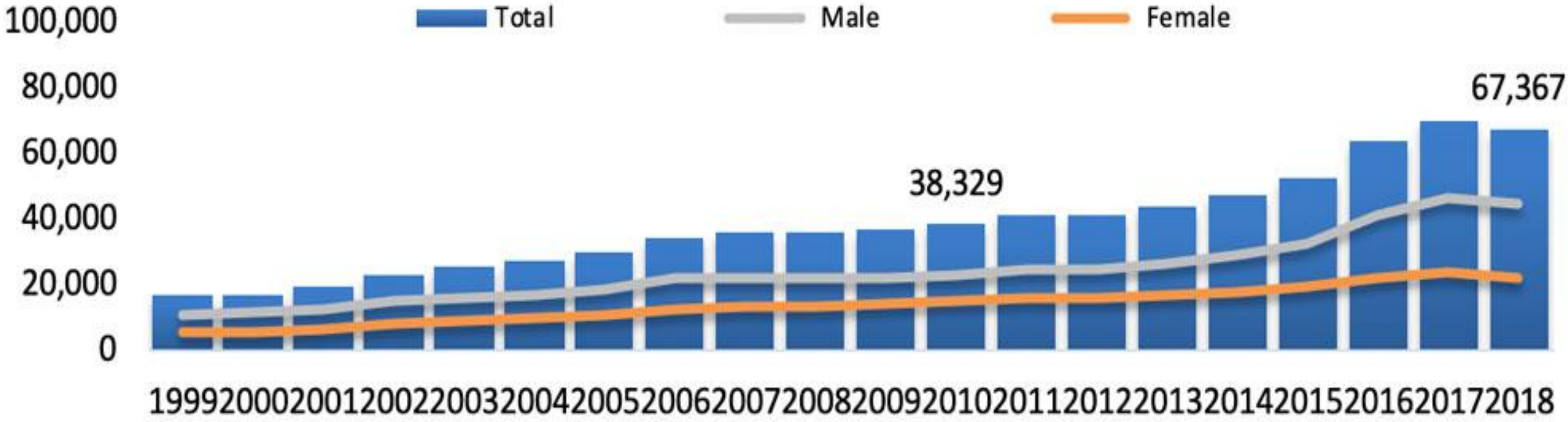
https://academic.oup.com/innovateage/article/3/1/igz002/5369972

Rationale for Research on Older Adults & Opioid Crisis

- Issues should be addressed when using opioid TX:
  - ✓ patient's goals
  - ✓ patient's quality of life
  - ✓ normal age-related physiological changes
  - ✓ benefits and risks
  - ✓ evidence-based alternative treatments for long-term pain (other than cancerous or palliative care)

National Drug Overdose Deaths

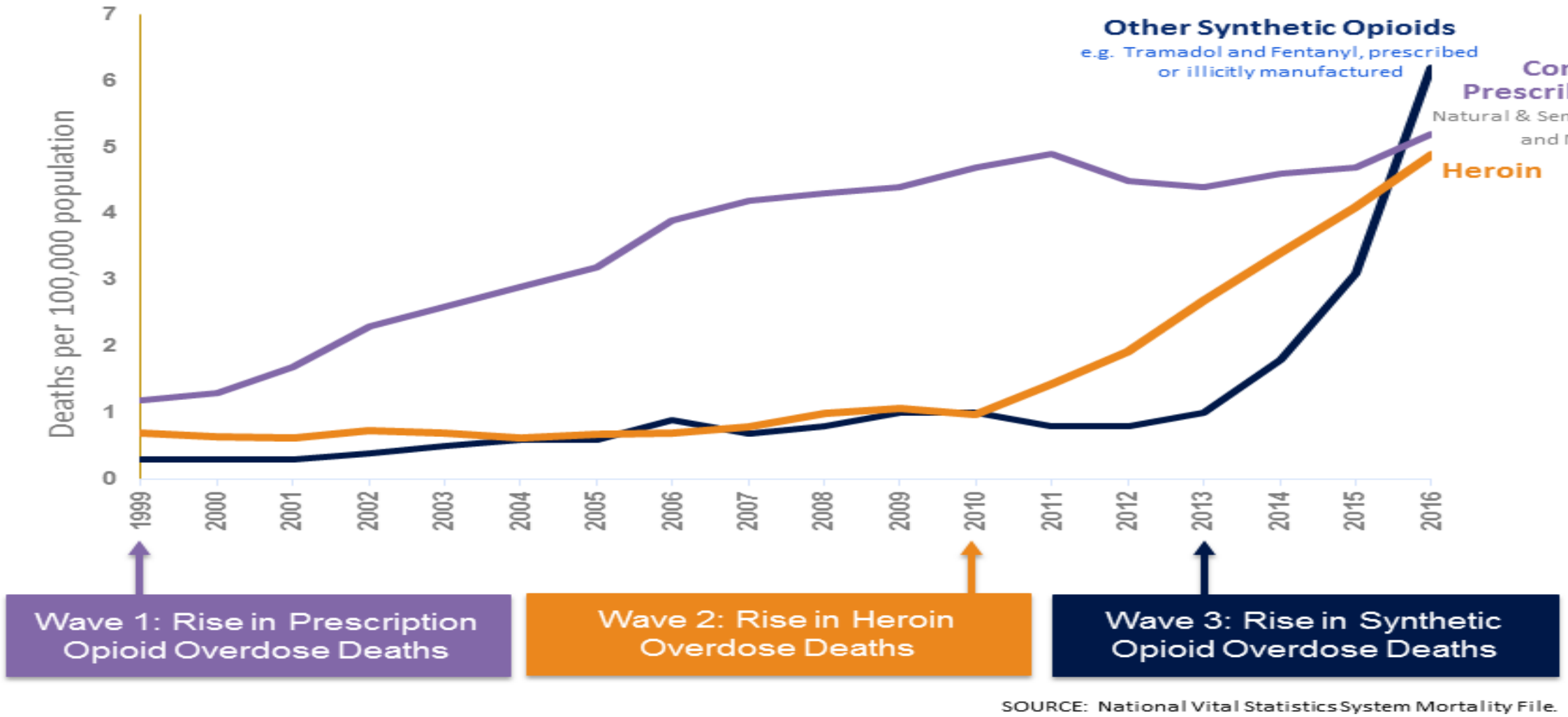
Number Among All Ages, by Gender, 1999-2018



38,329 in 2010 to 70,237 in 2017; sig. decrease [4.1%] in 2018 to 67,367 (CDC WONDER)

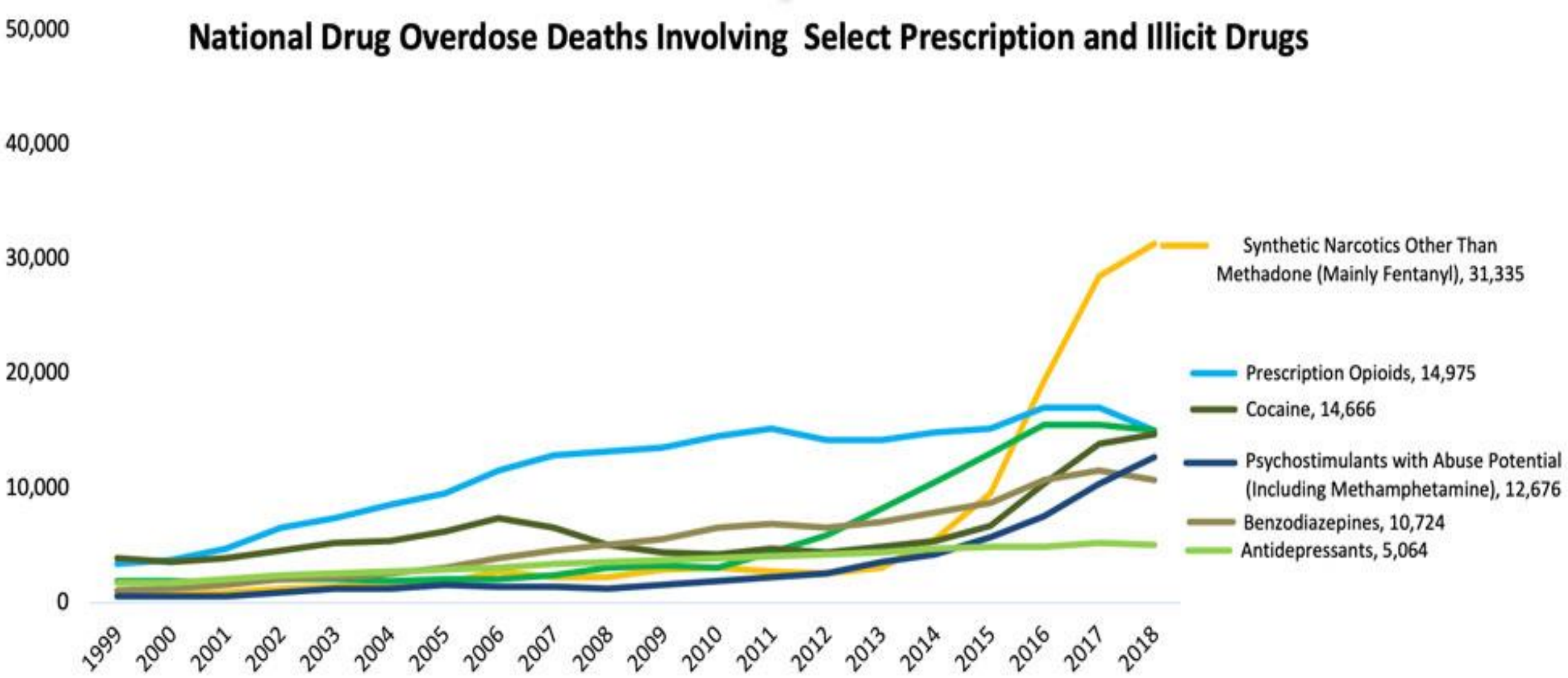
https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates

3 Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.

https://www.cdc.gov/drugoverdose/epidemic/index.html

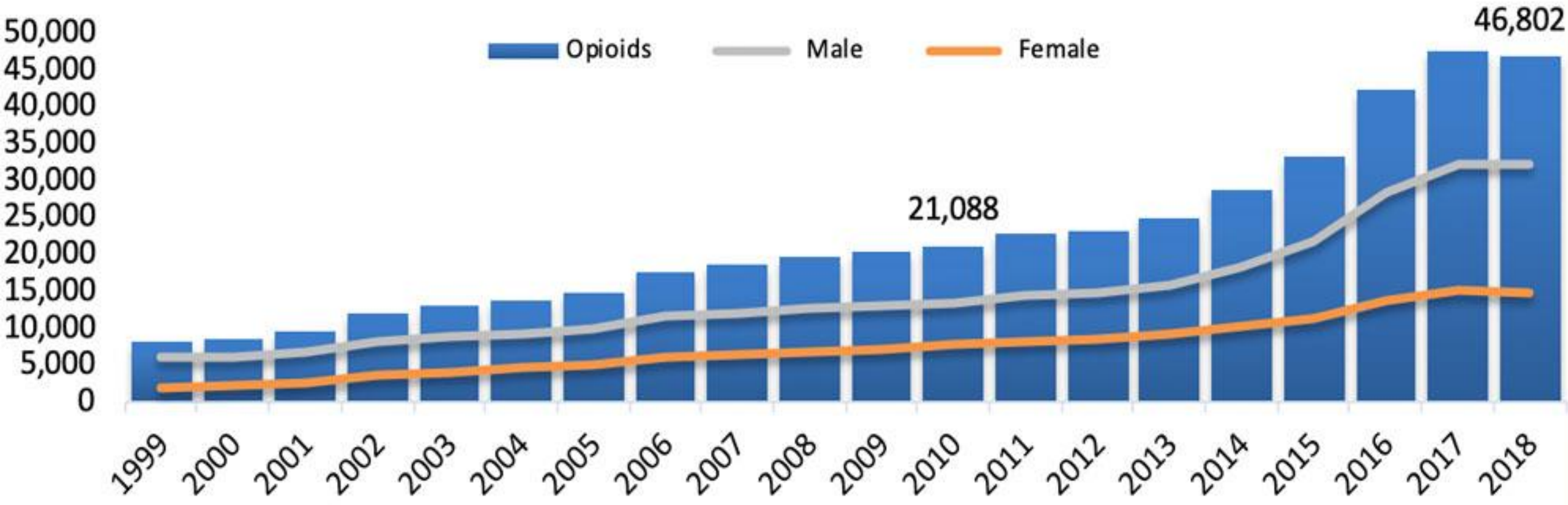


CDC WONDER Online Database, released January, 2020

https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates

National Drug Overdose Deaths Involving Any Opioid

Number Among All Ages, by Gender, 1999-2018

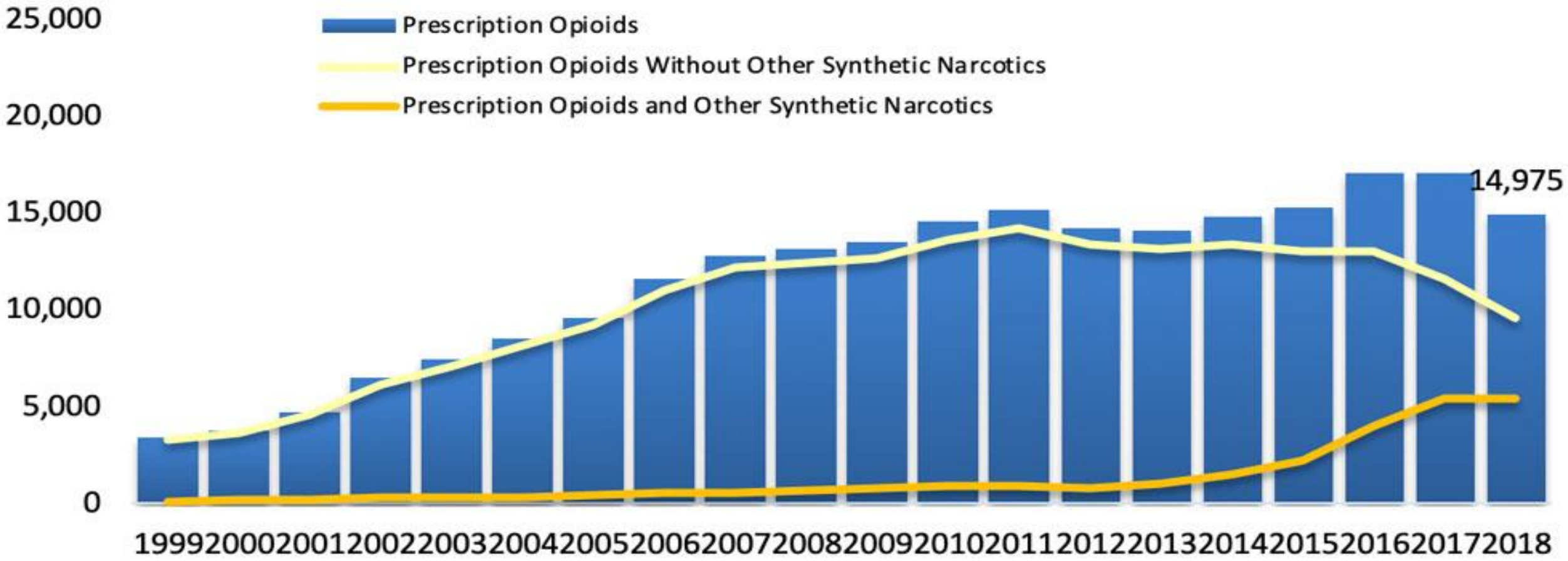


CDC WONDER Online Database, released January, 2020

**2018: daily128 average*

https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates

National Drug Overdose Deaths Involving Prescription Opioids, Number Among All Ages, 1999-2018



DC WONDER Online Database, released January, 2020

https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates

Drug Overdose Deaths in US : The Hard Truth, 1999 - 2018

- Drug overdose is a leading preventable cause of death in US today
- More than 700,000 deaths from a drug overdose
- More than 460,000 OD deaths involving any opioid
- 2018: nearly 70% all OD deaths = Opioids @ 46,802
- OD deaths involving opioids
  - ✓ prescription/illegal opioids was 6x higher in 2017 compared to 1999.

https://www.cdc.gov/drugoverdose/epidemic/index.html

www.daodas.sc.gov/wp-content/uploads/.../DAODAS-Opioid-Fact-Sheet_12_2017.pdf

Drug Overdose Deaths in US : The Hard Truth, 1999 - 2018

- Increasing trend in rate from 6.1% in 1999 to 21.7% in 2017.

- 2018: Synthetic opioids OD deaths (other than methadone) continued to rise with more than 28,400 (a rate of 9.9)

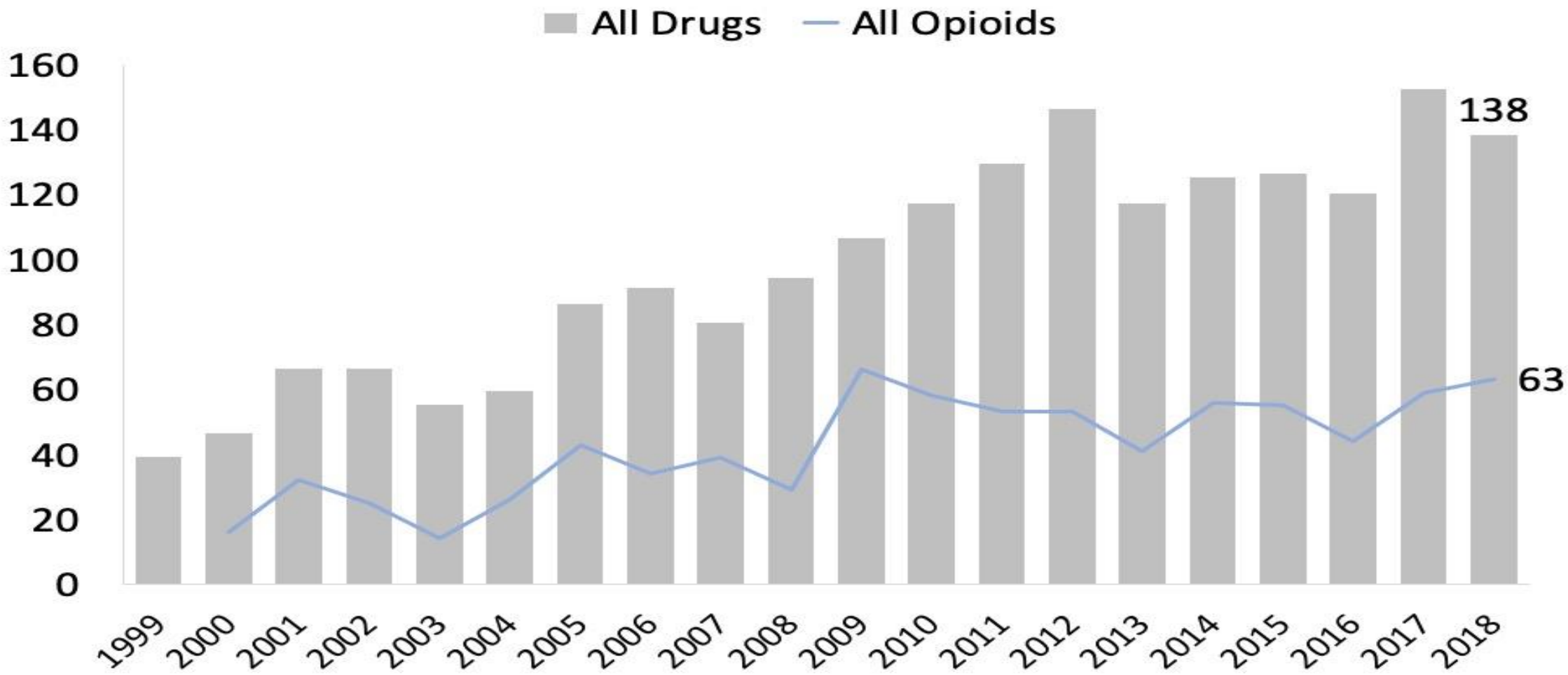
  - Fentanyl
    - ✓50x more potent than heroin
    - ✓100x more potent than morphine

  - Fentanyl analogue – Carfentanil
    - ✓10,000x more potent than morphine

https://www.cdc.gov/drugoverdose/epidemic/index.html

www.daodas.sc.gov/wp-content/uploads/.../DAODAS-Opioid-Fact-Sheet_12_2017.pdf

Drug-Involved Overdose Deaths in Nebraska



https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/nebraska-opioid-involved-deaths-related-harms 46% of the 138 drug overdose deaths involved opioids in 2018—a total of 63 fatalities

Drug Overdose Deaths in US: 2018's Good News

- ALL Drug overdose deaths decreased by 4.1% (67,367) over 2017
- Rate declined from 21.7 per 100,000 to 20.7 per 100,000
- Prescription opioids OD deaths declined to 14,975
- Heroin OD deaths dropped to 14,996 (a rate of 4.7) [not all good…]
  - 4% - 6% who misuse prescription opioids transition to heroin.
  - About 80% who use heroin first later misuse prescription opioids.
- Nationally: among 38 states with prescription opioid OD death data: 17 states saw decline from 2017; none saw significant increase.

Nebraska: Opioid-Involved Deaths and Related Harms. https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/nebraska-opioid-involved-deaths-related-harms

Hedegaard H, Miniño AM, Warner M. *Drug overdose deaths in the United States, 1999–2018*. NCHS Data Brief, no 356. Hyattsville, MD: National Center for Health Statistics. 2020.

Nebraska Opioid-Related Deaths: The Good News

- ORO deaths: NE did not meet inclusion criteria: < 4.0 per 100,000 = well below national average of 14.6
  - (highest is West VA @ 42.4 per 100,000).

- Contributors to low OD death rate:
  - ✓Prescription Drug Monitoring Program (PDMR)
  - ✓Naloxone [Narcan] availability
  - ✓Medication Disposal program
  - ✓Medication Assisted Treatment [MAT]

Predisposing Risk Factors in Older Adults & Opioid Use

- Higher incidence of chronic, persistent pain
  - ✓Last > 3 to 6 months
  - ✓Affects > 70 million Americans
  - ✓40% older adults compared to 30% general population
  - ✓Lowers patient quality of life
  - ✓Increases economic burden

Galicia-Castillo, M. Opioids for persistent pain in older adults. *Cleveland Clinic Journal of Medicine.* 2016 June 6; 83(6). Retrieved from: https://mdedge-files-live.s3.us-east-2.amazonaws.com/files/s3fs-public/issues/articles/Galicia-Castillo_OpiodsForOlderAdults.pdf

Hulisz, Darrenll (2007). Chronic Pain Management: Role of Newer Antidepressants and Anticonvulsants. https://www.uspharmacist.com/article/chronic-pain-management

Predisposing Risk Factors in Older Adults & Opioid Use

- Higher incidence of chronic, persistent pain
  - ✓Exposes potential for drug toxicity
  - ✓Addictive side effects
  - ✓Non-cancerous, non-palliative conditions
  - ✓Musculoskeletal - degeneration of bones, joints
  - ✓Mechanical – low back pain, visceral pain from expanding tumor masses

Galicia-Castillo, M. Opioids for persistent pain in older adults. *Cleveland Clinic Journal of Medicine.* 2016 June 6; 83(6). Retrieved from: https://mdedge-files-live.s3.us-east-2.amazonaws.com/files/s3fs-public/issues/articles/Galicia-Castillo_OpiodsForOlderAdults.pdf

Hulisz, Darrenll (2007). Chronic Pain Management: Role of Newer Antidepressants and Anticonvulsants. https://www.uspharmacist.com/article/chronic-pain-management

Predisposing Risk Factors In Older Adults & Opioid Use

QUALITY OF LIFE EFFECTED BY CHRONIC, PERSISTENT PAIN

NEUROPATHY

- Diabetic neuropathy
- Sensory neuropathy
- Phantom limb pain
- Fibromyalgia
- Post-stroke pain
- Multiple sclerosis
- Parkinson disease

INFLAMMATORY

- Arthropathies (rheumatoid, osteoarthritis)
- Postoperative pain
- Tissue injury

Galicia-Castillo, M. Opioids for persistent pain in older adults. *Cleveland Clinic Journal of Medicine.* 2016 June 6; 83(6). https://mdedge-files-live.s3.us-east-2.amazonaws.com/files/s3fs-public/issues/articles/Galicia-Castillo_OpiodsForOlderAdults.pdf

Predisposing Risk Factors in Older Adults & Opioid Use

- Complex chronic health conditions resulting in continuous pain
  - ✓ Higher rates of complex chronic health conditions
    - ✓ mental health conditions
    - ✓ substance use disorders
    - ✓ cognitive impairments
      - ✓ Delirium
      - ✓ Dementia

Hulisz, Darrenll (2007). Chronic Pain Management: Role of Newer Antidepressants and Anticonvulsants. https://www.uspharmacist.com/article/chronic-pain-management

Predisposing Risk Factors in Older Adults & Opioid Use

- Complex chronic health conditions resulting in continuous pain
  - ✓ Nearly 67% have two or more chronic conditions
    - ✓ advanced malignant disease
    - ✓ advanced heart disease
    - ✓ advanced obstructive pulmonary disease
    - ✓ advanced renal disease & dysfunction
    - ✓ gastrointestinal upset
  - ✓ Long-term side effects from use of NSAIDs for pain can worsen chronic health conditions [Nonsterioidal Anti-inflammatory Drugs]

Hulisz, Darrenll (2007). Chronic Pain Management: Role of Newer Antidepressants and Anticonvulsants. https://www.uspharmacist.com/article/chronic-pain-management

Predisposing Risk Factors in Older Adults & Opioid Use

- Falls & injury increases with age as individuals become more frail

  - ✓ Leading cause of fatal & nonfatal injuries, often requiring opioids to treat; TX is a predisposing risk factor for falls!)
  - ✓ One in every four older adults falls each year
  - ✓ ED every 8 seconds = 2.8 million treated
  - ✓ 800,000 hospitalizations

https://www.aginginplace.org/how-the-opioid-crisis-affects-the-elderly/

Predisposing Risk Factors in Older Adults & Opioid Use

- Falls & injury increases with age as individuals become more frail

  - ✓ Limits activities & social engagements often leading to further physical decline, depression, social isolation, feelings of helplessness

  - ✓ Death every 19 minutes = 27,000 deaths

https://www.aginginplace.org/how-the-opioid-crisis-affects-the-elderly/

Predisposing Risk Factors in Older Adults & Opioid Use

- Accumulation of trauma from life-time of events
  - ✓ Child or elder abuse, natural disasters
  - ✓ resulting in higher levels of anxiety & depression
    - ✓ (often treated with psychotropic meds -all side effects…can result in falls!)

Predisposing Risk Factors in Older Adults & Opioid Use

- Accumulation of Losses
  - ✓loved ones, social roles, retirement, relationships, identity, health – contribute to:
  - ✓decline in overall physical health
  - ✓increase in mental health issues
  - ✓substance use to cope – alcohol, benzodiazepines, opioids

Predisposing Risk Factors in Older Adults & Opioid Use

- Polypharmacy - use, misuse, abuse
  - ✓ Common in older adults
  - ✓ Typical older adults – average > 5 - 7
  - ✓ Consume 30% of all prescriptions; 40% of all OTC medications
  - ✓ **Age 50 - up**: 35% misused opioid in past 30 days
  - ✓ 500% increase of hospitalization over past 20 years

Predisposing Risk Factors in Older Adults & Opioid Use

- Polypharmacy - use, misuse, abuse
  - ✓ Effected by several factors:
    - ✓ co-morbid health conditions
    - ✓ age-related changes in drug metabolism
    - ✓ potential interactions with prescribed drugs, over-the-counter medications, dietary supplements, alcohol

Predisposing Risk Factors in Older Adults & Opioid Use

- Polypharmacy - use, misuse, abuse
  - ✓Increased risk:
    - ✓Falls
    - ✓Hospitalizations
    - ✓Cause other serious medical complications

Too Many Prescription Drugs Can Be Dangerous, Especially for Older Adults

https://publichealth.hsc.wvu.edu/media/3331/polypharmacy_pire_2_web_no-samhsa-logo.pdf

Predisposing Risk Factors in Older Adults & Opioid Use

- Polypharmacy - use, misuse, abuse
  - ✓ Who is most at risk?
    - ✓ Taking >5 medications
    - ✓ Chronic diseases of liver, kidney, heart
    - ✓ Combinations of sedatives, opiate pain relievers, benzodiazepines
    - ✓ Insulin or oral drugs for diabetes, heart medications
    - ✓ Living alone
    - ✓ History of substance abuse or other psychiatric problems

The Old View of Aging

Rethinking Views on Aging

20TH CENTURY VIEW OF AGING: AGING & DISEASE ARE SYNONYMOUS

21ST CENTURY VIEW OF AGING: AGING IS A PROCESS, NOT AN EVENT

https://www.unomaha.edu/college-of-public-affairs-and-community-service/center-for-public-affairs-research/documents/power-potential-aging-nebraska-slide-deck.pdf shout out to Uni.Nebraska @ Omaha

AGING: Old View - vs - New View

- AGING
  - Most significant Risk Factor : chronic diseases, types of cancer, types of heart disease, osteoporosis, hip fracture. Kidney failure, diabetes
    - Most are inevitable, we can begin taking actions to slow or delay the onset
  - National Institute on Aging (within NIH) Strategic directions: 2020 – 2025 https://www.nia.nih.gov/sites/default/files/2020-05/nia-strategic-directions-2020-2025.pdf
  - A process (not an event) – **interactive dynamic** between biological, physiological, environmental, psychological, behavioral, social processes
  - Ex: 55 year old may have aging as expected for75 year old; vice versa

https://www.nia.nih.gov/about/aging-strategic-directions-research/understanding-dynamics-aging

Age-related Changes in Older Bodies Can Increase Sensitivity to Opioids & Side Effects

- ✓Slowing of liver metabolism or hepatic function
  - ✓oxidation is variable & may decrease, resulting in prolonged drug-half-life; as consequence –
    - ✓Overweight or Obesity
    - ✓Cognitive and psychomotor impairment
    - ✓Hallucinations, nightmares

These changes and consequences of use of alcohol, medications, other substances are important considerations for older adults.

Galicia-Castillo. (2016). Opioids for persistent pain in older adults

Age-related Changes in Older Bodies Can Increase Sensitivity to Opioids & Side Effects

- ✓Diminished bone density
  - ✓long-term use increase osteoporosis risk
- ✓Presence of physical and/or mental illness or chronic conditions
- ✓Changes in ratio of muscle and fatty tissue distribution

**These changes and consequences of use of alcohol, medications, other substances are important considerations for older adults.*

Galicia-Castillo. (2016). Opioids for persistent pain in older adults

Age-related Changes in Older Bodies Can Increase Sensitivity to Opioids & Side Effects

- ✓ Changes in absorption and excretion –
  - ✓ slowing of gastrointestinal transit time
  - ✓ opioid-related dysmotility
  - ✓ decreased renal function

These changes and consequences of use of alcohol, medications, other substances are important considerations for older adults.

Galicia-Castillo. (2016). Opioids for persistent pain in older adults

Age-related Changes in Older Bodies Can Increase Sensitivity to Opioids & Side Effects

- ✓Changes in vision, balance and coordination
- ✓Reduced water in cells and tissues of the body
- ✓Require more time to clear medications and alcohol
  - ✓Aside notes:
    - ✓check for daily/ weekly alcohol consumption [‘less is more’ in older body!
    - ✓be alert to OTC meds, herbal & dietary supplements

These changes and consequences of use of alcohol, medications, other substances are important considerations for older adults.

Some Important Takeaways

- Prescription AND Illicit drug use in older adults is currently increasing.
- More susceptible to the effects of drugs due to aging body - often cannot absorb and break down drugs and alcohol easily.
- Unintentional misusing - forgetting to take, take too often, take wrong amount.
- Opioid misuse associated with: increased number of chronic conditions, greater risk of injury, higher rates of alcohol dependence, mental health diagnosis
- May take substances to cope with big life changes -- retirement, grief and loss, declining health, change in living situation.

The Scope of substance use in older adults https://www.drugabuse.gov/news-events/drugfacts/substance-use-in-older-adults-drugfacts

https://academic.oup.com/innovateage/article/3/1/igz002/5369972

Details Matter…Consider All Aspects before You Approach Change

Treatment Goals: Complete Relief or Other?

Complete pain relief is Not the goal, not realistic

- ✓Modulate pain
- ✓Ability to perform valued activities
- ✓Improve functioning
- ✓Feel well enough to socialize
- ✓Freedom from chronic painful conditions
- ✓Enhance quality of life

Nebraska Pain Management Guide, October 2017

Galicia-Castillo (2016). Opioids for persistent pain in older adults

Treatment Approach: Non-pharmaceutical

Often beneficial with minimal side effects

THERAPIES

- physical therapy
- occupational therapy
- acupuncture
- Chiropractic
- massage therapy
- Localized = joint injections & trigger-point injections

PSYCHOEDUCATIONAL

- cognitive behavioral therapy
- meditation
- patient education
  - Continue therapies & psychoeducation when introducing medications to minimize use & side effects

Nebraska Pain Management Guide, October 2017

Treatment Approach: Non-steroidal Anti-inflammatory Drugs

- Indicated
  - ✓reduce ongoing inflammation
  - ✓arthritic pain
  - ✓headaches
  - ✓fever
  - ✓support platelets
  - ✓reduce blood clotting
- Start at low dose in older adults
- Short-term – no more than two weeks during increased pain
- Adjust medication / dosage to cardiac and Gastrointestinal tract risk factors
- Approved in US:
  - ✓Aspirin
  - ✓Celebrex
  - ✓ibuprofen (Motrin, Advil)
  - ✓naproxen
- Side effects:
  - ✓nausea, vomiting, diarrhea,
  - ✓constipation, decreased appetite,
  - ✓dizziness

Treatment Approach: Non-steroidal Anti-inflammatory Drugs

Use with Caution if Pre-existing Diseases are Present

POTENTIALLY FATAL RISKS

- ✓bleeding
- ✓ulcers
- ✓perforation of intestines
- ✓heart attack
- ✓Stroke

CONSEQUENCE OF CHRONIC USE

- ✓kidney failure
- ✓liver failure
- ✓ulcers
- ✓prolonged bleeding after injury/ surgery
- ✓fluid retention resulting in edema [swelling ankles is common]

Nebraska Pain Management Guide

Older Adults and Treatment Approaches

- World Health Organization three-step ladder recommended

  - ✓ Step 1: Non-opioid analgesics – with or without adjuvant agents (i.e., antidepressant or anticonvulsant)

    - Acetaminophen (not more than 3g in 24 hrs – two 500mg = 1 gram)
    - Topical therapies – Capsaicin (for neurophathic pain), Lidocaine

Galicia-Castillo (2016). Opioids for persistent pain in older adults.
Hulisz, Darrell (2007) Chronic Pain Management. *Role of Newer Antidepressants and Anticonvulsants* https://www.uspharmacist.com/article/chronic-pain-management

Older Adults and Treatment Approaches

- WHO - Step 1: Non-opioid analgesics – with or without adjuvant agents (i.e., antidepressant or anticonvulsant)
  - Adjuvants –
    - Cymbalta [SSRI] = chronic low back pain, fibromyalgia, peripheral neuropathy, osteoarthritis knee pain
    - Gabapentin [Neurontin], Lyrica [Pregabalin] = (2nd gen. anticonvulsant, better tolerated, fewer side drug interactions)

Galicia-Castillo (2016). Opioids for persistent pain in older adults.
Hulisz, Darrell (2007) Chronic Pain Management. *Role of Newer Antidepressants and Anticonvulsants* https://www.uspharmacist.com/article/chronic-pain-management

Older Adults and Treatment Appraoch

- ✓WHO - Step 2: Weak opioid (i.e. tramadol or codeine) – with our without non-opioid analgesic and with or without adjuvant agent

- ✓WHO - Step 3: Strong opioid (i.e. morphine, oxycodone, hydromorphone, fentanyl, methadone) – with or without non-opioid analgesic and without or without adjuvant agent

Galicia-Castillo (2016). Opioids for persistent pain in older adults

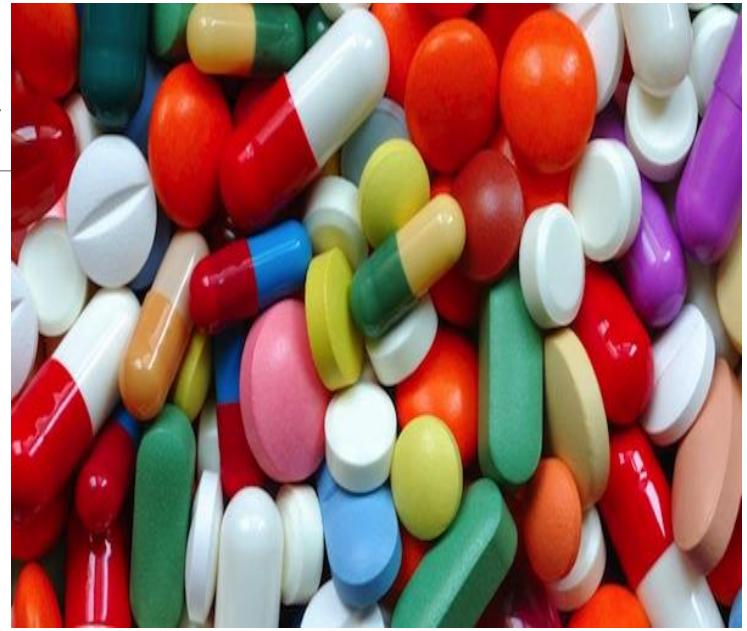
Older Adults, Treatment Approach, Starting Strong Opioid Therapy

- ✓Timeframe - 3 months or longer
- ✓Choose short-acting agent
- ✓Give it on a trial basis
- ✓Start with low dose, titrate slowly
- ✓Once efficacy is determined, monitor continually

Galicia-Castillo (2016). Opioids for persistent pain in older adults

Commonly Prescribed Opioids for Pain

- **Morphine** (MS Contin®, Kadian®, Avinza®)
  - before & after surgical procedures treat severe pain
- **Codeine** (Tylenol with Codeine®, Robitussin AC®)
  - prescribed for mild pain
- **Hydrocodone** (Vicodin®, Lortab®, Zydone®)
  - prescribed to relieve moderate to severe pain



- **Oxycodone** (OxyContin®, Percodan®, Percocet®, Tylox®, Roxicet®)
  - used to relieve moderate to severe pain
- **Fentanyl** (Duragesic®)
  - 50 X more potent than heroin; 100 X more potent than morphine
  - commonly delivered through a “pain patch” for severe ongoing pain

Benefit – Risk Analysis for Use of Opioids

BENEFITS

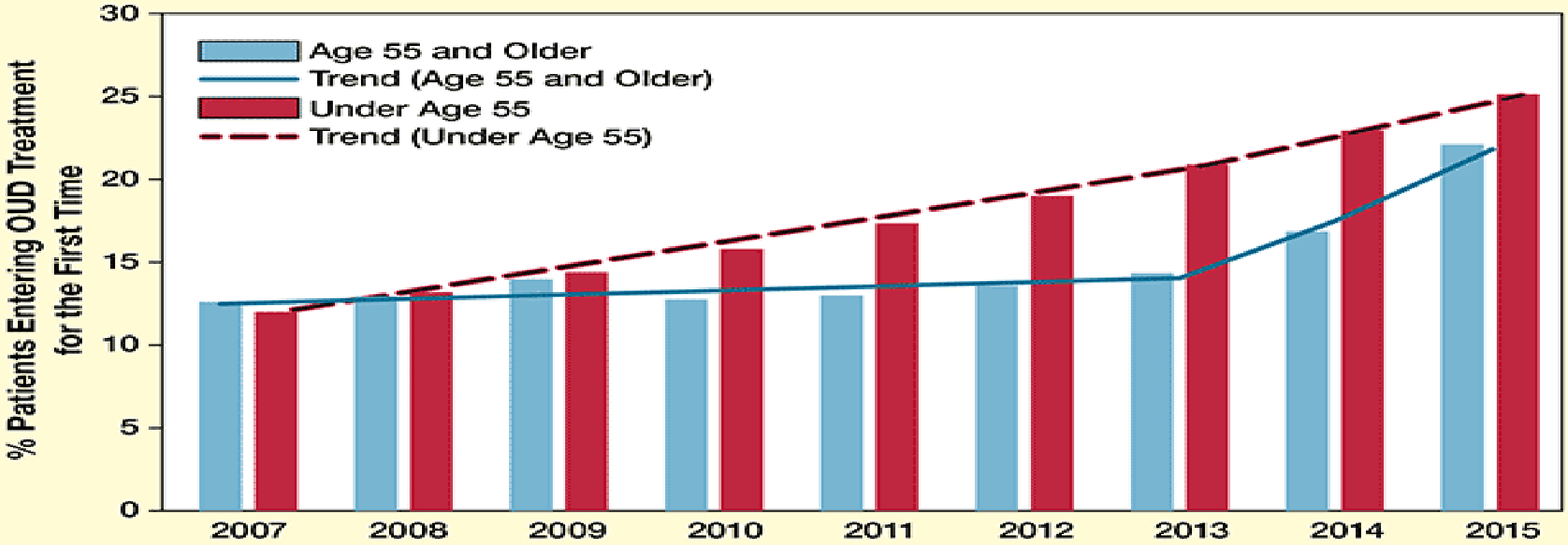
- ✓Pain management (otherwise may be immobilized, homebound)
- ✓Increase functionality
- ✓Increase mobility
- ✓Improve quality of life
- ✓Maintain independence – greatest predictor of health

RISKS

- ✓Constipation (effects 48%)
- ✓Nausea (body detects in blood)
- ✓Urinary retention (to renal toxic)
- ✓Liver failure (build up of toxins)
- ✓Breathing complications
- ✓Cognitive impairment
- ✓Drug interaction problems
- ✓Sedation
- ✓Suicidal ideation
- ✓Addiction – Opioid Use Disorder
- ✓Death - Respiratory Depression

First-Time Treatment Admissions for Primary Opioid Use Disorder (OUD) in Adults Age 55 and Older Almost Doubled Since 2007

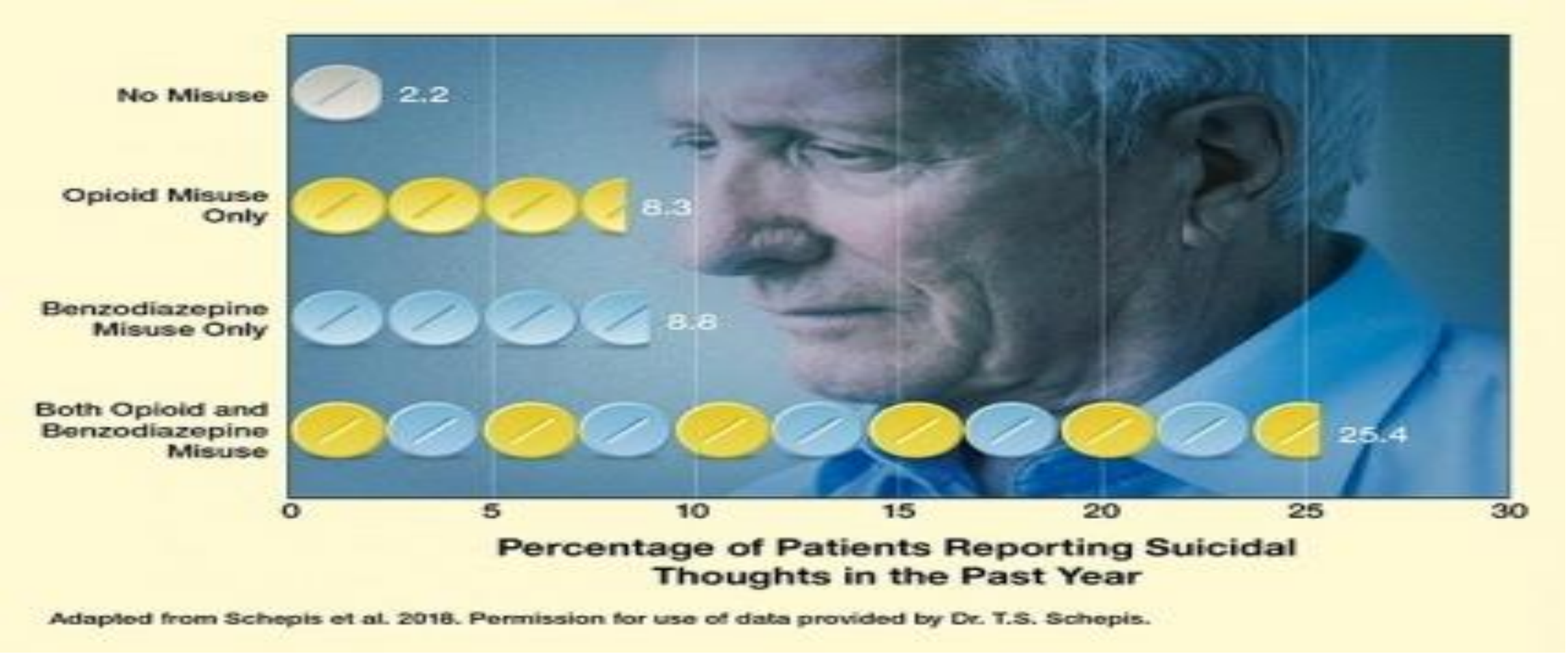
**(5% to 12% develop OUD)*



Adapted from Huhn et al. 2018. Permission for use of data provided by Dr. A.S. Huhn.

https://www.drugabuse.gov/news-events/nida-notes/2019/07/drug-use-its-consequences-increase-among-middle-aged-older-adults#figure1

Figure 2. Adults Age 50 and Older Who Misuse Prescription Opioids and Benzodiazepines Are at Increased Risk of Suicidal Thoughts



https://www.drugabuse.gov/news-events/nida-notes/2019/07/drug-use-its-consequences-increase-among-middle-aged-older-adults#figure1

Why are Opioids Addictive?

- Class of drugs that interacts with opioid receptors on nerve cells in the brain and nervous system
  - blocks pain receptors or reduces intensity of pain signals reaching the brain
  - activate reward centers of brain to produce pleasurable effects
- Brain responds to pain medicine by increasing number of receptors for the drug, & nerves cells in brain stop functioning; body stops producing endorphins (body's natural painkillers) [enjoys external opiates instead]

Why are Opioids Addictive?

- Tolerance = 'diminishing effect' = same amount of opioid, but worsening of pain; increase amount to alleviate pain; more difficult to discontinue due to withdrawal symptoms

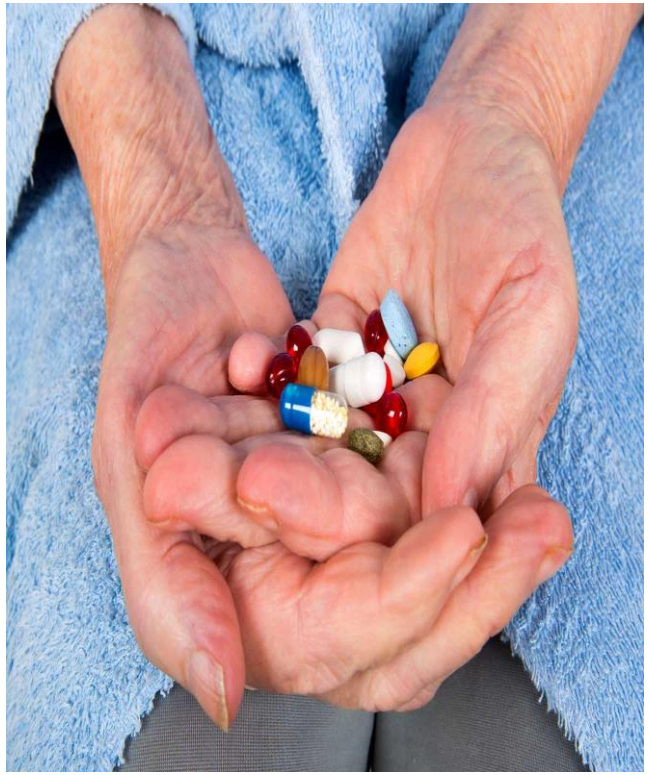
- Physical and psychological dependence can occur with long-term usage (>3 months increase risk of dependence)

- Withdrawal Symptoms = degeneration of nerve cells in brain causes a physical dependence on external supply of opiates …reducing or simply not taking pain killers cause painful series of physical change

Why are Opioids Addictive?

- Estimated 7% prescribed opiate users continue taking meds to avoid withdrawal symptoms rather than treat the original pain

- Depending on how much of the substance and how the substance is taken, the body can experience serious side effects and severe risks



The Opioid Epidemic. https://youtu.be/eW0M731ZyVw
(good resources of opioid use, types, TX,)

The Fix. https://youtu.be/xWl6QgOCg8E

Adams, Taite. Senior Addiction. 2015

Opioids & Aging Body: Minimal Risks When Taken Properly

- Even when taken properly, opioids remain in body of older adult longer
- Almost always non-addictive & beneficial = short-term gains

> "Improvement in function is single most important data point to demonstrate that opioids are effective and appropriate.
>
> Conversely, if no meaningful or measurable improvement in function is seen, opioid use is less likely appropriate."

- Many patients do better after tapering, grateful to "*have their lives back*"

Nebraska Pain Management Guide, pg. 23

Opioid & Aging Body: Increased Risks When Taken Improperly whether by accident or intentional

- Opioids can worsen an older adult's overall health
  - ✓ risk of "*opioid-induced Hyperalgesia*"
    - ✓ pain gets WORSE when use in excess amounts or long term
    - ✓ decrease ability to tolerate pain
    - ✓ increase sensitivity to pain
    - ✓ can never take enough or high enough dose
  - ✓ Risk of "*acetaminophen-related liver failure*"
    - ✓ build up of toxins in liver over time & at high doses

Adams, Taite. Senior Addiction

Opioids & Aging Body: Increased Risks When Taken Improperly whether by accident or intentional

- Opioids can worsen an older adult's overall health
  - ✓higher risk of accidents, falls and injuries
    - ✓4x more likely to experience compound bone fractures (from falls)
  - ✓risk of heart attack doubles
  - ✓risk of hypoxia due to slowed or depressed respiration
  - ✓Risk of coma & permanent brain damage resulting from less oxygen to brain

Opioids & Aging Body: Increased Risks When Taken Improperly whether by accident or intentional

- Opioids can worsen an older adult's overall health
  - ✓ Cognitive impairment:
    - ✓ decision-making abilities, confusion,
    - ✓ comprehension, delirium,
    - ✓ ability to regulate behavioral responses to stressful situations

  - ✓ Increased risk of new episode of depression (St. Louis Univ. Med. Ctr, 2013)
    - ✓ opioids > 180 days = 53% risk;
    - ✓ opioids 90-180 days = 25% risk
    - ✓ opioids < 89 days = 0% risk

Older Adults at Greater Risk of Overdose from Prescription Opioids

- ✓ first time users of opioid painkillers
- ✓ taking opioids in combination: multiple forms of opioids, alcohol, sleeping pills, anti-anxiety meds, other benzodiazepines
- ✓ living with sleep apnea, heart failure, obesity, severe asthma or respiratory conditions
- ✓ long-term medical use of opioids (> 89 days)

National Safety Council, 1121 spring lake drive, itasca, il 60143-3201, (800) 621-7619, nsc.org

Source of Prescription Painkillers

- Fewer than 10% are purchased from drug dealers or other strangers
- Nearly 50% of non-medical users of prescription opioids get them from friends or relatives
- 25% get them by prescription from physicians
- Majority receive the prescriptions from one doctor (not multiple as suspected!)

https://www.psychiatrictimes.com/substance-use-disorder/opioid-epidemic-who-blame

https://www.samhsa.gov/data/sites/default/files/report_2686/ShortReport-2686.html

Where Chronic Pain, Opioid Meds, & ADDICTION Collide

- ✓ Opiate use or dosage increases, yet function continues to decline
- ✓ Opiate is used longer than originally prescribed (note that *very few patients require more than one week of opiate use*)
- ✓ Opiate is being taken for reasons other than pain, such as when the person is feeling anxious, bored, or depressed

https://healthblog.uofmhealth.org/wellness-prevention/how-to-spot-signs-of-opioid-addiction
University of Michigan

Where Chronic Pain, Opioid Meds, & ADDICTION Collide

- ✓Use of the opiate results in *feeling high*, signifying that too much is likely being taken
- ✓The individual wants to decrease opiate use, but is unable to do so on his or her own
- ✓An excessive amount of time is spent procuring opiates or the person seeks out other drugs if the opiates cannot be secured

https://healthblog.uofmhealth.org/wellness-prevention/how-to-spot-signs-of-opioid-addiction University of Michigan

Where Chronic Pain, Opioid Meds, & ADDICTION Collide

- ✓Strong urges or cravings for opiates despite being aware of their negative consequences
- ✓Withdrawal from social and recreational activities once enjoyed
- ✓Engaging in reckless behaviors more frequently
- ✓Experiencing withdrawal symptoms such as diarrhea, sweating, and moodiness if the drug is not taken in a consistent and timely manner

https://healthblog.uofmhealth.org/wellness-prevention/how-to-spot-signs-of-opioid-addiction

Warning Signs in Older Adults: Opioid Meds & ADDICTION Collide

- ✓Worrying about having “enough” medication on hand
- ✓Excessive worry about whether drugs are “really working”
- ✓Giving excuses as to why they need the pills
- ✓Self-medicating by increasing doses of prescribed drugs that “aren’t helping anymore”; or supplementing with OTC drugs

Adams, Taite. Senior Addiction

Warning Signs in Older Adults: Opioid Meds & ADDICTION Collide

- ✓Complaints about doctors who refuse to write another prescription
- ✓"doctor-shopping" – moving from provider to provider in effort to get several prescriptions for same medication
- ✓Behavior or mood change
- ✓Withdrawal from family, friends, neighbors, lifelong social practices

Adams, Taite. Senior Addiction

Warning Signs in Older Adults: Opioid Meds & ADDICTION Collide

- ✓Sleeping during the day or signs of sleep disturbances
- ✓Falls or unexplained injuries (might be result of excessive sedation)
- ✓Changes in personal grooming and hygiene

Adams, Taite. Senior Addiction

Warning Signs in Older Adults: Opioid Meds & ADDICTION Collide

- ✓Having same medication from more than one physician or pharmacy at approximately the same time
- ✓Annoyance or discomfort when someone talks about their use of medications
- ✓Sneaking or hiding pills / pill bottles

Adams, Taite. Senior Addiction

Take Aways: Health Care Providers Reduce Risk of Overdose

- Use non-opioid medications & other therapies in combination with opioids.
- Non-opioid meds [MAT]: methadone & suboxone
- Prescribe the lowest effective dosage of opioids to reduce risks of opioid use disorder and overdose.
- Discuss potential benefits and harms of opioids with patients.
- Physical Therapy for hip/knee osteoarthritis, lower back pain, fibromyalgia
- Electrical nerve stimulation (TENS) = transcutaneous electrical nerve stimulation)

https://www.aginginplace.org/how-the-opioid-crisis-affects-the-elderly/

https://jamanetwork.com/journals/jama/fullarticle/2503507

Language Matters even with “legacy patients”

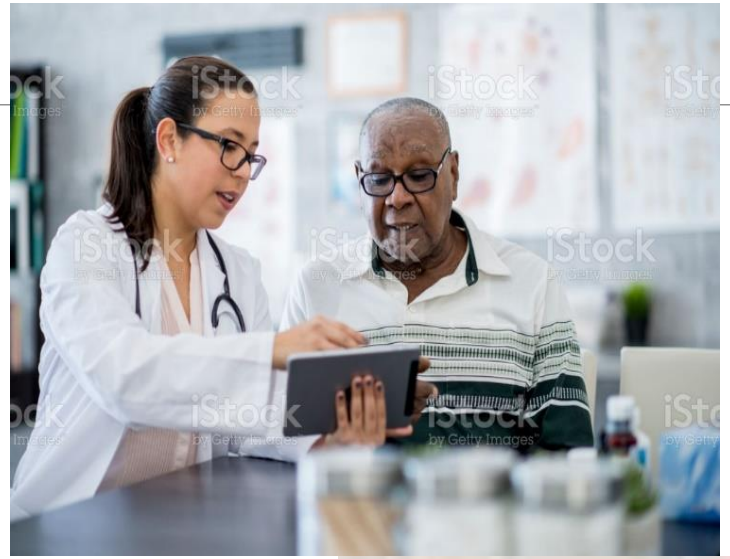
- High dose, chronic use pattern >6 months and into years
- Assess other medications for potential drug interactions – self-report, urine screening, prescription drug monitoring program
- They deserve compassion, respect, support
- May have come to believe they cannot cope without continuing opioid regimen

Language Matters even with "legacy patients"

- Best practices: slow dosage reduction results in improved quality of life for most
- Chronic use pattern increases predispose to opioid use disorder
- Assess for other co-occurring mental health disorders may be present – depression, anxiety, trauma
- Know your referral community (place on speed dial)

Initiating the Difficult Conversations with Your Patients

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." – Maya Angelou



Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment. Topics:*

- ✓ *Controlled substance agreements between client & clinic*

- ✓ *National, state, local practice guidelines for safe-prescribing practices*

Nebraska Pain Management Guidance Document, October 2017. *"Helping People Live Better Lives"*. www.nebraskahospitals.org.

Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment. Topics:*

- ✓ *Opioids or other controlled substances will not be prescribed and/or increased*

- ✓ *Opioids will be discontinued and/or tapered*

Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment. Topic:*

  - ✓ *Expect strong patient feelings when presented with possibility of reducing or eliminating opioids especially when opioid is primary coping strategy for dealing with physical, emotional, psychological, post- traumatic pain*

Nebraska Pain Management Guidance Document, October 2017.
"Helping People Live Better Lives".
www.nebraskahospitals.org

Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment.* *Topic:*

✓ *Reducing or stopping opioids can also trigger a terrifying response for patients' family*

Nebraska Pain Management Guidance Doc. October 2017. *"Helping People Live Better Lives"*. www.nebraskahospitals.org.

Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment.* *Topics:*

  - ✓ *Patient's emotional reaction in form of anger will likely be directed toward prescribing provider and healthcare team*

Initiating the Difficult Conversations with Your Patient

- *Common to experience challenging conversations with patients when safety guidelines are introduced into plan of treatment. Topics:*

  - ✓ *Possibility of living without opioid may be causing the underlying strong emotional expression – fear, grief, panic, sadness, and belief that living without opioid meds is impossible*

  - ✓ *Do not understand rationale for tapering or removing opioids when appropriate*

  - ✓ *Did not set out to develop problematic use patterns*

Nebraska Pain Management Guidance Document, Oct 2017. "Helping People Live Better Lives".

Helping the Patient Work Through Change: Begins with You

- Value identification
- Holding realistic expectations
- Your own willingness to feel uncomfortable
- Use your relationship as a source
- Express belief and confidence
- Remember Motivational Interviewing – tenets!

Nebraska Pain Management Guidance Document, Oct. 2017. *"Helping People Live Better Lives"*. www.nebraskahospitals.org

Helping the Patient Work Through Change: Begins with You

"People are usually better persuaded by the reasons which they have themselves discovered than by those which have come into the minds of others."

- Blaise Pascal

Patient Actions to Reduce Risk of Overdose

- ✓If an opioid is still indicated, discuss taking the lowest dose possible for the shortest duration.

- ✓Heat applications to improve blood flow:
  - ✓dry heat = heating pad, dry heating packs
  - ✓Moist heat = saunas, steamed towel, moist heating packs, hot baths
- ✓*Cold massage (max 5 min at time, 2-5 x/day) slows inflammation & swelling, numbs sore tissue, interrupts pain-spasm reaction

*avoid in elderly with rheumatoid arthritis, cold-allergic conditions, or paralyzed

https://youtu.be/EsAgnVMWxBc CDC campaign

National Safety Council, 1121 spring lake drive, itasca, il 60143-3201, (800) 621-7619, nsc.org

Patient Actions to Reduce Risk of Overdose

- ✓Report to your doctor - all other medications and drugs you take & how much alcohol you consume.
- ✓Ask your doctor about how long the medicine will be in your body and whether and when you can drive.
- ✓Do not use more of an opioid painkiller without talking to your doctor.
- ✓Safe Storage –Up, away, out of sight, lock up; put meds away after use
- ✓Safe Disposal - Properly dispose of them after used up

https://youtu.be/EsAgnVMWxBc CDC campaign

National Safety Council, 1121 spring lake drive, itasca, il 60143-3201, (800) 621-7619, nsc.org

Patient Actions to Reduce Risk of Overdose

- ✓Avoid mixing opioids with alcohol, sleeping pills, anti-anxiety medications -- never with Benzodiazepines
  - ✓difference between feeling pain relief and fatal amount is small, unpredictable

- ✓Don’t Share - a friend, family member, coworker, even if the person is in pain. Sharing pain medication is illegal and dangerous

- ✓If taking opioids yourself or family member (especially if using a high daily dose), include Naloxone (Narcan) in prevention kit – can administer until 911 or other medical help arrives

National Safety Counsel, ncs.org

Patient Actions to Reduce Risk of Overdose

- ✓If you suspect someone may have overdosed, call 9-1-1 immediately.
- ✓After calling 9-1-1, move the person into the recovery position and be prepared for CPR
- ✓Administer Narcan immediately. It will not harm them and it may mean the difference between life and death.

National Safety Council, 1121 spring lake drive, itasca, il 60143-3201, (800) 621-7619, nsc.org

Conclusion

- Like people of all ages, older adults are at risk of misusing and abusing prescription opioids and susceptible of acquiring an opioid use disorder.
- Due to chronic, long-term non-cancerous pain, older adults are likely to receive multiple prescriptions for opioids.
- Older people taking opioids will likely experience more severe side effects due to bodily processes that generally slow with age.
- Most admissions to substance use treatment centers are for alcohol.
- Behavioral therapies & medications have been successful in treating Substance Use Disorders (including Opioid Use Disorder)

Conclusion

- Medications are highly underutilized in treatment of SUDs.
- Never too late to quit using substances—improve quality of life &future health.
- More science is needed on the effects of substance use on the aging brain; and on effective models of care for older adults with substance use disorders.
- Providers may confuse symptoms of substance use with other symptoms of aging, which could include chronic health conditions or reactions to stressful, life-changing events.

The Scope of substance use in older adults https://www.drugabuse.gov/news-events/drugfacts/substance-use-in-older-adults-drugfacts

Conclusion

- The first line of treatment for chronic pain should not be opioids; there are a wide range of proven alternatives to opioids for pain relief.

- Evidence-based medication assisted treatments are available for those persons who develop opioid use disorder.

- Key is Education: many partners including community, state, and federal agencies can help educate older adults (and prescribers) with information about opioids and their appropriate use and treatment programs for OUD.

Appendices:

- Federal Health and Human Services, 2015

  https://archives.drugabuse.gov/about-nida/noras-blog/2015/03/hhs-announces-actions-to-attack-opioid-abuse-crisis

- Center for Disease Control, 2016
  https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fmmwr%2Fvolumes%2F65%2Frr%2Frr6501e1er.htm

- Federal Health and Human Services, 2017

  https://www.hhs.gov/about/agencies/asl/testimony/2017-10/federal-response-opioid-crisis.html

National Response to Opioid Crisis

- March 26, 2015: department-wide initiative to combat the opioid epidemic – three priority areas:

  - ✓"Opioid prescribing practices to reduce opioid use disorders & overdose

  - ✓Expand use of Naloxone to treat opioid overdoses [Narcan]

  - ✓Expanded use of Medication-assisted Treatment (MAT) to reduce opioid use disorders and overdose." (methadone, buprenorphine, naltrexone, suboxone)" [block effects of opioid]

National Response to Opioid Crisis

- March 2016: CDC Guideline for Prescribing Opioids for Chronic Pain:

  - ✓"Explains benefits and risks associated with prescription opioids
  - ✓Provides evidence-based guide for clinicians & patients in shared decision-making about use of opioids for chronic pain management
  - ✓Prescribing guideline states: *'long-term opioid use has uncertain [pain management] benefits but known, serious risks.'"*

CDC Guidelines for Prescribing Opioids for Chronic Pain, USA, 2016

- Prompted by increasing number of opioid prescriptions that resulted in risk of Opioid Use Disorder, overdose, and death

- Specified for treatment of pain outside of active cancer treatment, palliative care, and end-of-life care

CDC Guidelines for Prescribing Opioids for Chronic Pain, USA, 2016

- Pain management for patients beyond age 65; GUIDELINES:
  - ✓Non-opioid therapy preferred for chronic pain outside of active cancer, palliative care and end-of-life care.
    - ✓i.e., exercise, relaxation techniques, Cognitive Behavior Therapy, massage therapy , topical pain agents, acupuncture, chiropractic care
  - ✓Establish treatment goals with patients including a plan for discontinuation of opioid therapy if risks outweigh benefits.
  - ✓Discuss the risks and benefits of opioid therapy with patients prior to treatment; revisit possible harms & benefits at least every three months.

CDC Guidelines for Prescribing Opioids for Chronic Pain, USA, 2016

- ✓When starting opioid therapy, prescribe immediate-release opioids instead of extended-release (or long acting) opioids.

- ✓When opioids are used, prescribe the lowest possible effective dosage to reduce risks of OUD and overdose.

- ✓Review patients' history of controlled substance use and consult PDMPs to determine risk for overdose.

CDC Guidelines for Prescribing Opioids for Chronic Pain, USA, 2016

- ✓Use drug testing to identify other prescribed medications as well as illicit or undisclosed drugs.

- ✓Avoid prescribing opioid pain medications and benzodiazepines at the same time when possible.

- ✓Offer or make arrangements for evidence-based treatment with medication-assisted treatment for patients with OUD.

National Response to Opioid Crisis

- October 26, 2017:

  the Department of Health and Human Services declared that a nationwide public health emergency exists due to the opioid crisis

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https://files.nc.gov/ncdhhs/Opioid_Overdose_Factsheet_FINAL_06_27_17.pdf

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https://www.cdc.gov/drugoverdose/epidemic/index.html

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