Northwestern Medicine®

Pain Management During an Opioid Epidemic

Judith A. Paice, PhD, RN
Director, Cancer Pain Program
Division of Hematology-Oncology
Northwestern University; Feinberg School of Medicine
Chicago, IL

NAIWOCN
May 1, 2018

Management of Pain

- Safe and effective management of pain requires thorough assessment of pain, function and risk factors for misuse;
- Use of pharmacologic and non-pharmacologic therapies, along with risk mitigation strategies to avoid misuse and diversion; and
- Trends in public policy that are impacting the ability of clinicians to treat pain appropriately

Nothing to disclose

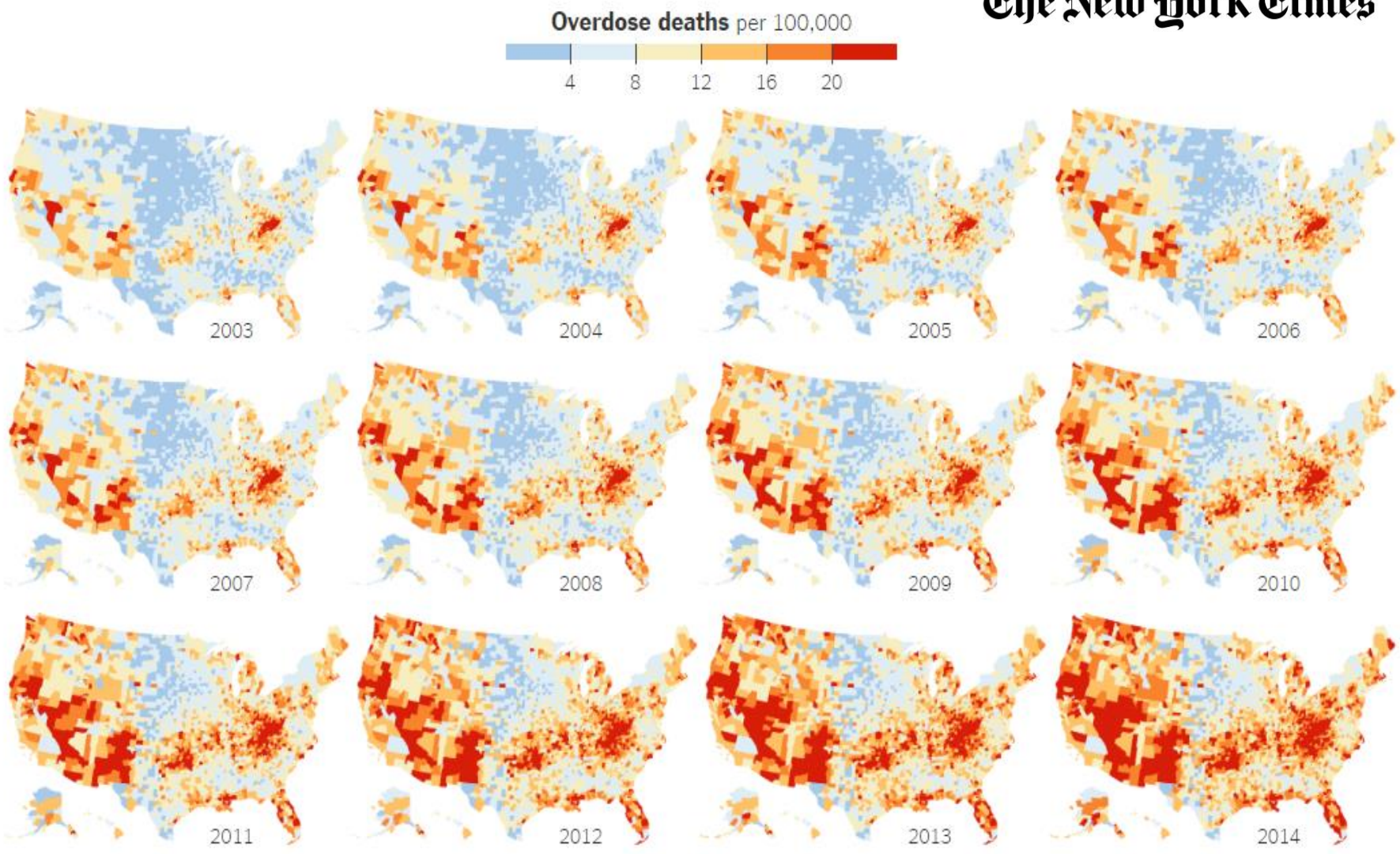
Good News/Bad News

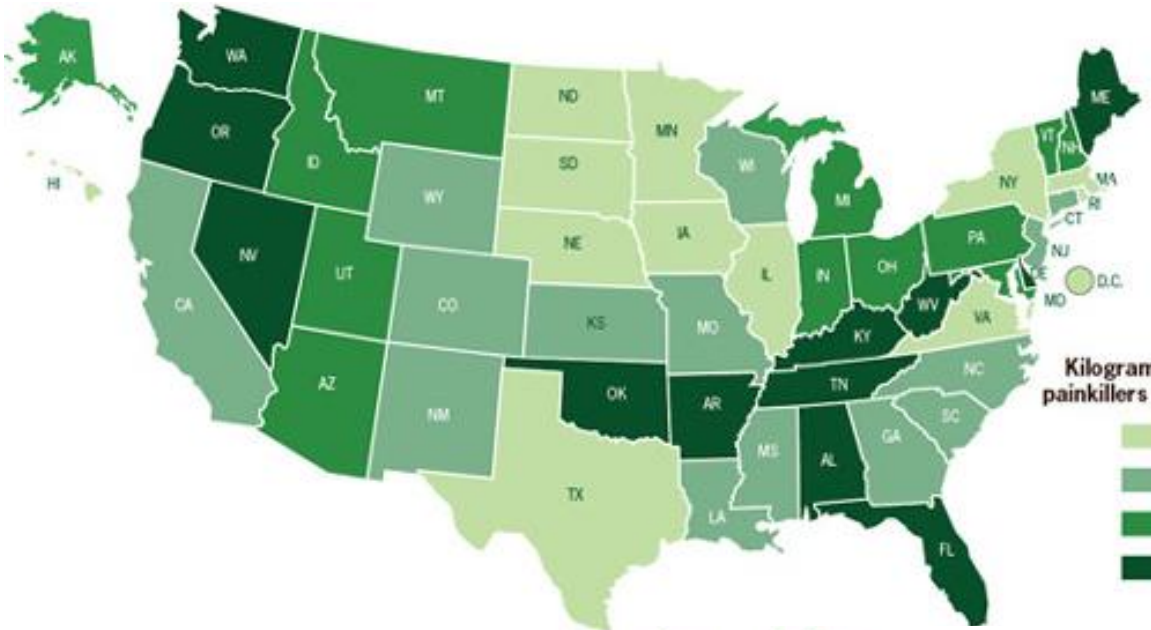
- Good news – more treatments are leading to better survival from a variety of serious illnesses
- Bad news – more persistent pain syndromes
- More bad news – opioid abuse epidemic

How the Epidemic of Drug Overdose Deaths Ripples Across America

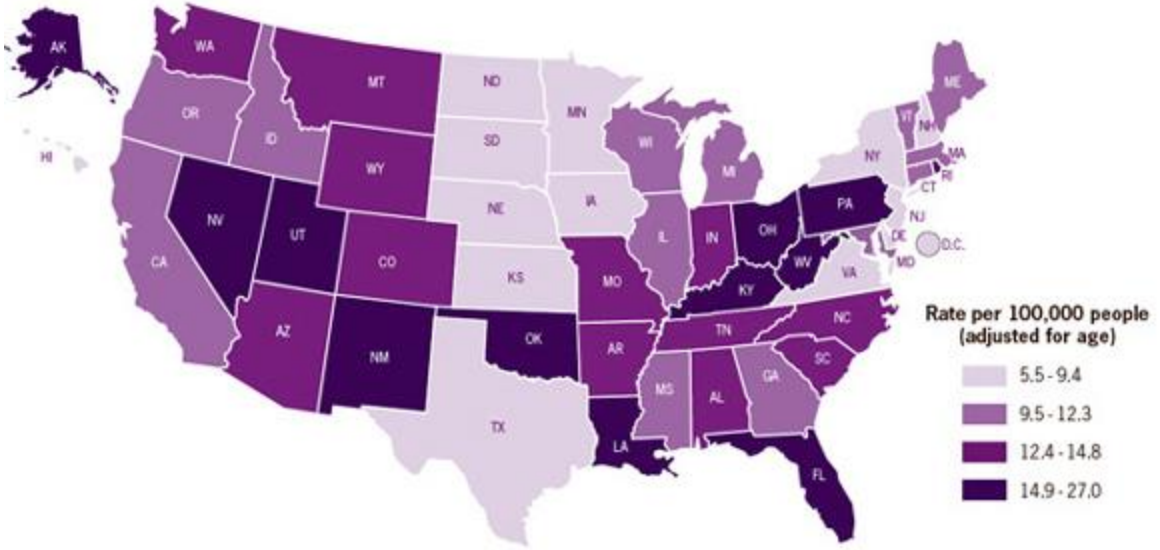
By HAEYOUN PARK and MATTHEW BLOCH JAN. 19, 2016

The New York Times



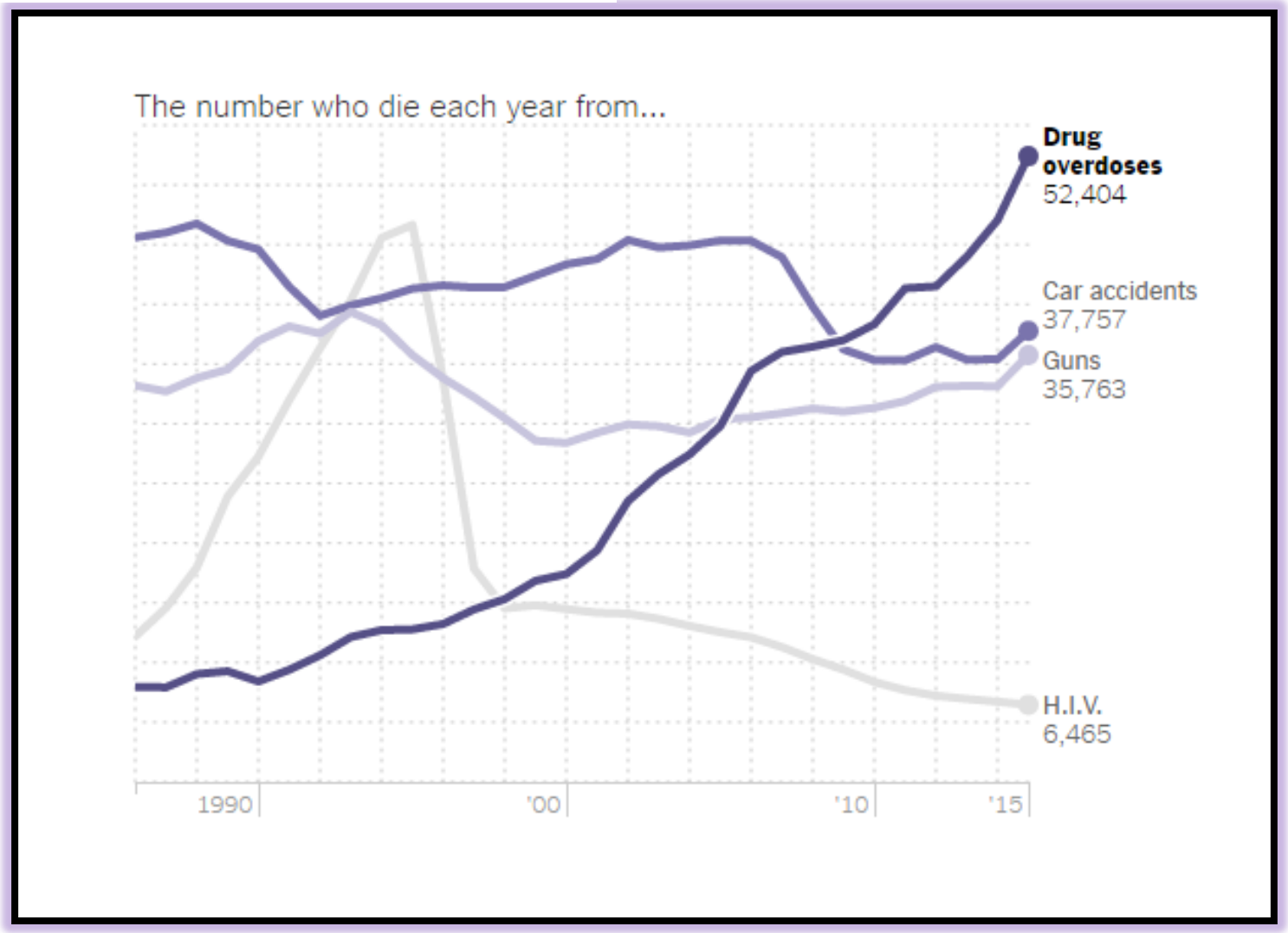


Amount of prescription painkillers sold by state per 10,000 people (2010)



Drug overdose death rates by state per 100,000 people (2008)

The New York Times



April 14, 2017

Geography - Chicago

Opioid-related overdose deaths occurred across Chicago – with decedents having resided in 73 of the 77 (95%) community areas.

Top five community areas (number of deaths)

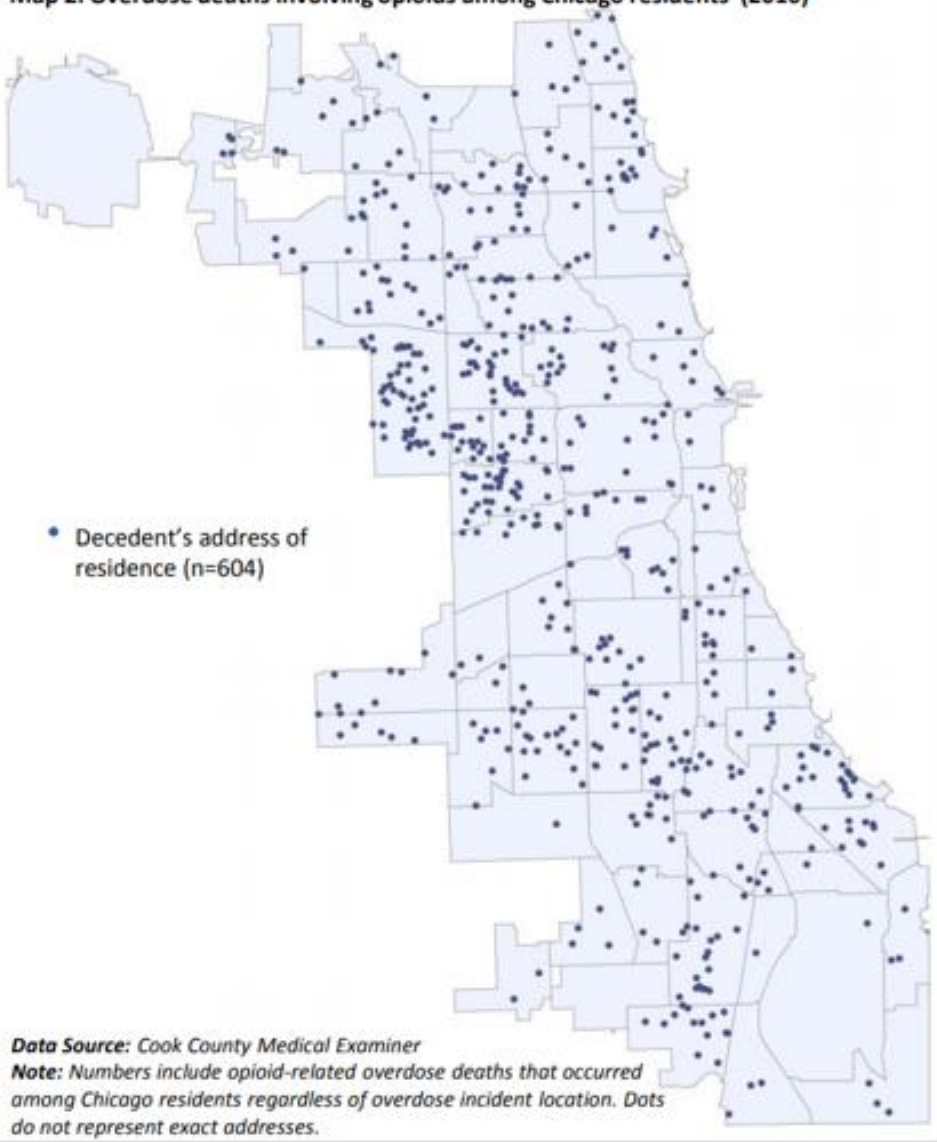
1) Austin (50)
2) North Lawndale (29)
3) Humboldt Park (28)
4) West Town (19) and South Shore (19)
5) Roseland (18)

Community areas with zero deaths

1) Edison Park
2) North Park
3) Armor Square
4) Morgan Park

Opioid-related overdose deaths occurred in 95% of Chicago community areas in 2016.

Map 2. Overdose deaths involving opioids among Chicago residents (2016)



Data Source: *Cook County Medical Examiner*
Note: *Numbers include opioid-related overdose deaths that occurred among Chicago residents regardless of overdose incident location. Dots do not represent exact addresses.*

https://www.cityofchicago.org/content/dam/city/depts/cdph/tobacco_alchohol_and_drug_abuse/2016ChicagoOpioidReport.pdf

Table 2. Percentage of all opioid-related overdose deaths involving specific opioids – Chicago, 2015-2016		
Opioid Type[i]	2015 (n=426)	2016 (n=741)
Heroin-involved	80.9%	65.7%
Fentanyl-involved	16.7%	56.6%
Opioid pain reliever-involved[ii]	7.5%	5.4%
Methadone-involved	6.6%	6.5%

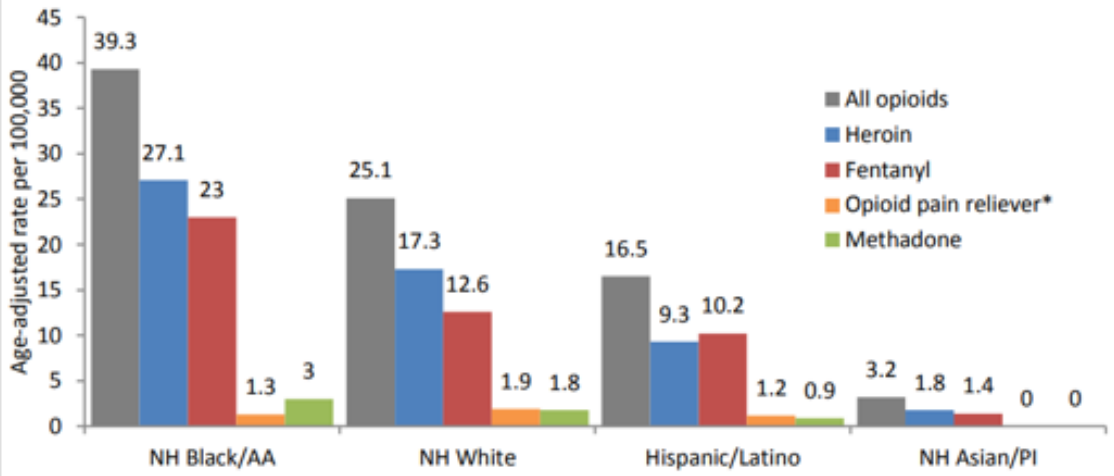
Data Source: *Cook County Medical Examiner's Office*

[i] *Categories are not mutually exclusive as some deaths involved more than one opioid. Percentages will not add to 100%.*

[ii] *Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, oxycodone, oxymorphone, or tramadol.*

Note*: Numbers include all opioid-related overdose deaths that occurred in Chicago, regardless of decedent's address of residence.*

Figure 3. Opioid-related overdose death rates by race-ethnicity and opioid type – Chicago, 2016



Data Source: *Cook County Medical Examiner*

NH = non-Hispanic, PI = Pacific Islander, AA = African American

** Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, oxycodone, oxymorphone, or tramadol.*

Note*: Numbers include all opioid-related overdose deaths that occurred in Chicago, regardless of decedent's address of residence.*

https://www.cityofchicago.org/content/dam/city/depts/cdph/tobacco_alchohol_and_drug_abuse/2016ChicagoOpioidReport.pdf

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

SEARCH

CDC A-Z INDEX

Injury Prevention & Control: Opioid Overdose

- Opioid Overdose
- Opioid Basics +
- Data +
- CDC Guideline for Prescribing Opioids for Chronic Pain −
  - For Patients
  - For Providers
  - Guideline Resources
  - Frequently Asked Questions
- Prescription Drug Monitoring Programs (PDMPs) +
- State Information +

CDC > Opioid Overdose

CDC Guideline for Prescribing Opioids for Chronic Pain

Improving the way opioids are prescribed through clinical practice guidelines can ensure patients have access to safer, more effective chronic pain treatment while reducing the number of people who misuse, abuse, or overdose from these drugs.

CDC developed and published the CDC Guideline for Prescribing Opioids for Chronic Pain to provide recommendations for the prescribing of opioid pain medication for patients 18 and older in primary care settings. Recommendations focus on the use of opioids in treating chronic pain (pain lasting longer than 3 months or past the time of normal tissue healing) outside of active cancer treatment, palliative care, and end-of-life care.

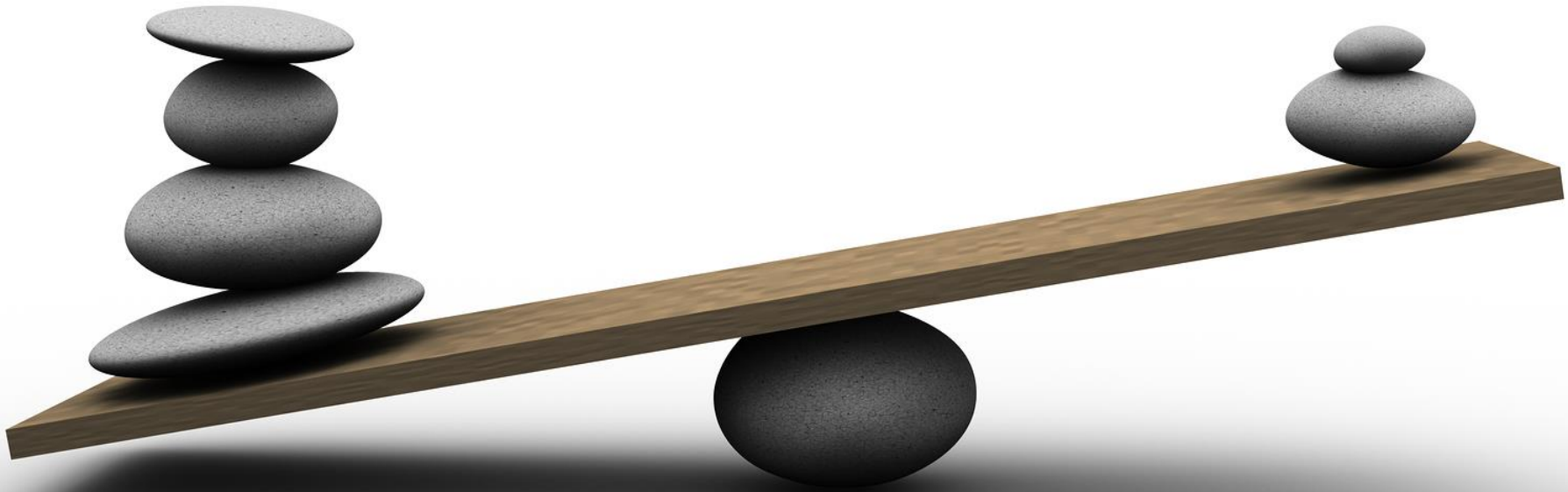
Released March 18, 2016

CDC Recommendations

5. When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when increasing dosage to **50 morphine milligram equivalents** (MME) or more per day, and should avoid increasing dosage to 90 MME or more per day or carefully justify a decision to titrate dosage to 90 MME or more per day.
6. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. **Three days or less will often be sufficient; more than 7 days will rarely be needed.**


Payers
Industry
Doctors
Joint Commission
Government
Patients

How Do We Achieve Balance?



Pain Control

Opioid Misuse Epidemic

Substance Use Disorder

- Addiction: "chronic disease of brain reward, motivation, memory, and related circuitry," characterized by "an individual pathologically pursuing reward and/or relief by substance use and other behaviors"
- Addiction is not a choice or a moral failure
- Stigma
  - "Abuser"
  - "Frequent flyer"
- Leads to judgment, punitive beliefs rather than compassion

Substance Use Disorders are Chronic Medical Illnesses

- Drug/alcohol continuous abstinence 1 year post discharge ~40-60%
- Optimal adherence to treatment
  - Diabetes < 60%
  - Hypertension < 40%
  - Adult onset asthma < 40%
- Proportion of patients requiring medical care to re-establish control
  - Adults with type 1 diabetes 30-50%
  - Adults with hypertension or asthma 50-70%

McLellan AT, et al. JAMA; 2000:284:1689-1695.

Available online at www.sciencedirect.com
ScienceDirect
European Journal of Pain 11 (2007) 490–518
www.EuropeanJournalPain.com

Review

Addiction to opioids in chronic pain patients: A literature review

Jette Højsted *, Per Sjøgren

Multidisciplinary Pain Centre, University Hospital of Copenhagen, Rigshospitalet, Blegdamsvej 9, 2100 Copenhagen, Denmark

Received 20 February 2006; received in revised form 28 August 2006; accepted 30 August 2006
Available online 27 October 2006

Abstract

Opioids have proven very useful for treatment of acute pain and cancer pain, and in the developed countries opioids are increasingly used for treatment of chronic non-malignant pain patients as well. This literature review aims at giving an overview of definitions, mechanisms, diagnostic criteria, incidence and prevalence of addiction in opioid treated pain patients, screening tools for assessing opioid addiction in chronic pain patients and recommendations regarding addiction problems in national and international guidelines for opioid treatment in cancer patients and chronic non-malignant pain patients.

The review indicates that the prevalence of addiction varied from 0% up to 50% in chronic non-malignant pain patients, and from 0% to 7.7% in cancer patients depending of the subpopulation studied and the criteria used. The risk of addiction has to be considered when initiating long-term opioid treatment as addiction may result in poor pain control. Several screening tools were identified, but only a few were thoroughly validated with respect to validity and reliability.

Most of the identified guidelines mention addiction as a potential problem. The guidelines in cancer pain management are concerned with the fact that pain may be under treated because of fear of addiction, and the guidelines in management of non-malignant pain patients include warnings of addiction. According to the literature, it seems appropriate and necessary to be aware of the problems associated with addiction during long-term opioid treatment, and specialised treatment facilities for pain management or addiction medicine should be consulted in these cases.

Keywords: Addiction; Chronic pain; Screening tools; Questionnaires; Incidence; Prevalence

Available online at www.sciencedirect.com
ScienceDirect
European Journal of Pain 11 (2007) 490–518
www.EuropeanJournalPain.com

Review

Addiction to opioids in chronic pain patients: A literature review

Jette Højsted *, Per Sjøgren

Multidisciplinary Pain Centre, University Hospital of Copenhagen, Rigshospitalet, Blegdamsvej 9, 2100 Copenhagen, Denmark

Received 20 February 2006; received in revised form 28 August 2006; accepted 30 August 2006
Available online 27 October 2006

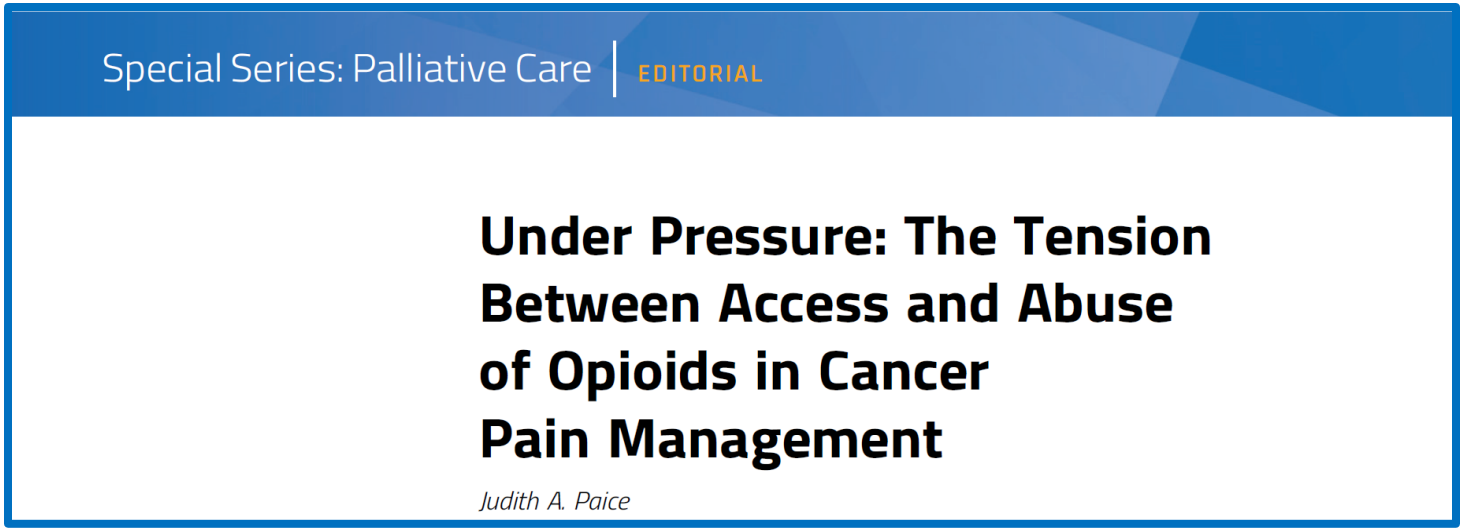
Abstract

Opioids have proven very useful for treatment of acute pain and cancer pain, and in the developed countries opioids are increasingly used for treatment of chronic non-malignant pain patients as well. This literature review aims at giving an overview of definitions, mechanisms, diagnostic criteria, incidence and prevalence of addiction in opioid treated pain patients, screening tools for assessing opioid addiction in chronic pain patients and recommendations regarding addiction problems in national and international guidelines for opioid treatment in cancer patients and chronic non-malignant pain patients.

The review indicates that the prevalence of addiction varied from 0% up to 50% in chronic non-malignant pain patients, and from 0% to 7.7% in cancer patients depending of the subpopulation studied and the criteria used. The risk of addiction has to be considered when initiating long-term opioid treatment as addiction may result in poor pain control. Several screening tools were identified, but only a few were thoroughly validated with respect to validity and reliability.

Most of the identified guidelines mention addiction as a potential problem. The guidelines in cancer pain management are concerned with the fact that pain may be under treated because of fear of addiction, and the guidelines in management of non-malignant pain patients include warnings of addiction. According to the literature, it seems appropriate and necessary to be aware of the problems associated with addiction during long-term opioid treatment, and specialised treatment facilities for pain management or addiction medicine should be consulted in these cases.

Keywords: Addiction; Chronic pain; Screening tools; Questionnaires; Incidence; Prevalence



- Similar histories of cancer and SUD (stigma, fear, blame)
- DEA reduced opioid manufacturing 25% in 2017
- 24 states proposed 59 bills during first 6 months/2017
  - Enhanced education, develop guidelines
  - Limit opioids to certain groups, time limits (3-7 day supply, maximum dosage (100 mg OME/day)
  - Some exempt hospice/palliative care, few exempt cancer

Journal of Oncology Practice; epub August, 2017

Review Article

Cancer Pain Management and the Opioid Crisis in America: How to Preserve Hard-Earned Gains in Improving the Quality of Cancer Pain Management

Judith A. Paice, PhD, RN [1,2]

Epub March, 2018

Barriers Related to Patients and Family Members

RELUCTANCE TO REPORT PAIN
- Anxiety regarding meaning of pain
- Fear presence of pain will limit treatment options
- Concerns of being "a bother" to the oncology team
- Assumptions that pain is to be expected, that team knows they have pain

FEAR OF ADDICTION
- Enhanced by media attention to opioid misuse epidemic and celebrity deaths

INADEQUATE TRAINING IN USE OF PAIN MEDICATIONS
- Reduced adherence due to misunderstandings regarding opioid use and "prn" administration

SOCIOECONOMIC LIMITATIONS TO ACCESSING TREATMENT
- Support to get to clinic for reassessment, cost of transportation, families taking off work

COGNITIVE AND AFFECTIVE FACTORS

Barriers Related to Health Care Professionals

INADEQUATE KNOWLEDGE

INSUFFICIENT PAIN ASSESSMENT DUE TO INADEQUATE KNOWLEDGE, COMPETING PRIORITIES, TIME LIMITATIONS

LACK OF AWARENESS OF THE BIOPSYCHOSOCIAL AND SPIRITUAL COMPONENTS OF PAIN

RELUCTANCE TO PRESCRIBE OPIOIDS
- Concerns about adverse effects, addiction, tolerance
- Belief that opioids are to be used only during terminal phase
- Worry about payment, need for prior authorization, delays in access
- Fear of regulatory oversight, loss of license

Barriers Related to Health Care Systems

INADEQUATE TIME

LIMITED ACCESS TO PAIN SPECIALTY CARE

LIMITED REIMBURSEMENT FOR OPIOID AND NON-OPIOID THERAPIES

LIMITED PAYMENT FOR AND/OR ACCESS TO NON-PHARMACOLOGIC THERAPIES (E.G., PT/OT, MENTAL HEALTH

COUNSELING, INTEGRATIVE THERAPIES)

LIMITED FORMULARIES

SHORTAGES OF OPIOIDS IN RETAIL AND HOSPITAL PHARMACIES

Educate patients and family members regarding:

- Importance of reporting and treating pain in oncology
- Their individual risk for addiction based upon risk assessment along with strategies that will be employed to prevent misuse
- Appropriate use of ATC and prn opioids and need to follow directions carefully
- Need to use opioids for pain relief only, not to treat anxiety or sadness, or to enhance sleep
- Need to have one prescriber (may be one team in oncology) provide prescriptions
- Safe storage and disposal of medications

Oncology professionals will obtain education regarding:

- Comprehensive pain and addiction risk assessment
- Tolerance, physical dependence, addiction
- Universal precautions
- Regulatory and licensing statues that guide clinical practice and opioid prescribing in their state

Health systems and oncology practices will provide access to:

- Prescription drug monitoring data within the electronic health record
- Laboratory services that provide rapid urine toxicology results
- Pain and palliative care specialists
- Adequate opioid and other pharmacological formularies
- Mental health counseling
- Non-pharmacological and integrative pain therapies
- Addiction resources

American Society of Clinical Oncology

JOURNAL OF CLINICAL ONCOLOGY

ASCO SPECIAL ARTICLE

Management of Chronic Pain in Survivors of Adult Cancers: American Society of Clinical Oncology Clinical Practice Guideline

Judith A. Paice, Russell Portenoy, Christina Lacchetti, Toby Campbell, Andrea Cheville, Marc Citron, Louis S. Constine, Andrea Cooper, Paul Glare, Frank Keefe, Lakshmi Koyyalagunta, Michael Levy, Christine Miaskowski, Shirley Otis-Green, Paul Sloan, and Eduardo Bruera

Paice JA, et al. *J Clin Oncol* 34:3325-3345,2016

What is a Cancer Survivor?

National Coalition for Cancer Survivorship

- Survivor - from the moment of diagnosis through the rest of their life

National Cancer Institute's Office of Cancer Survivorship

- Survivor is a person with a history of cancer who is beyond the acute diagnosis and treatment phase

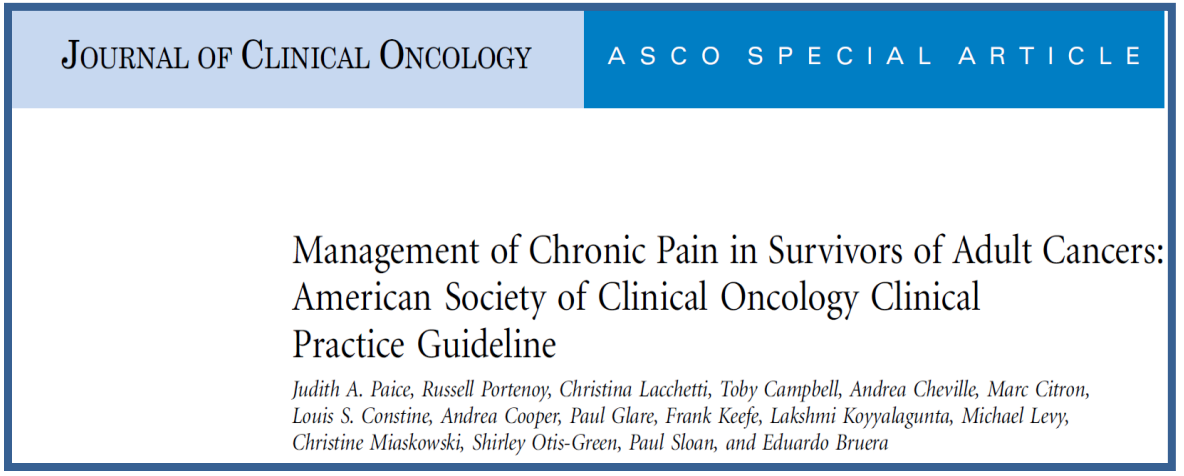
- 14 million in the United States
- 2/3 living 5 years or longer
- Prevalence of pain 40% or higher

https://www.canceradvocacy.org/
https://cancercontrol.cancer.gov/ocs/

Van den Beuken-van Everdingen MH, et al. *J Pain Symptom Manage* 51: 1070-1090, 2016

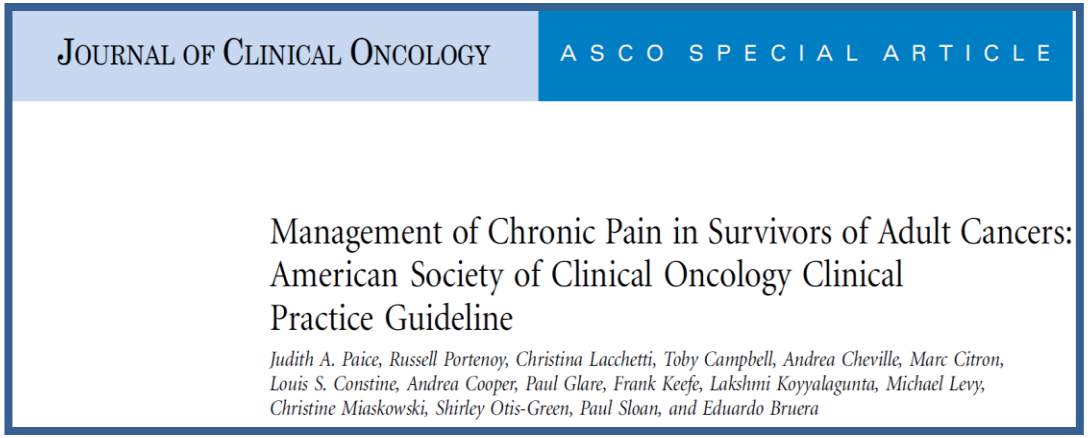
Key Recommendations

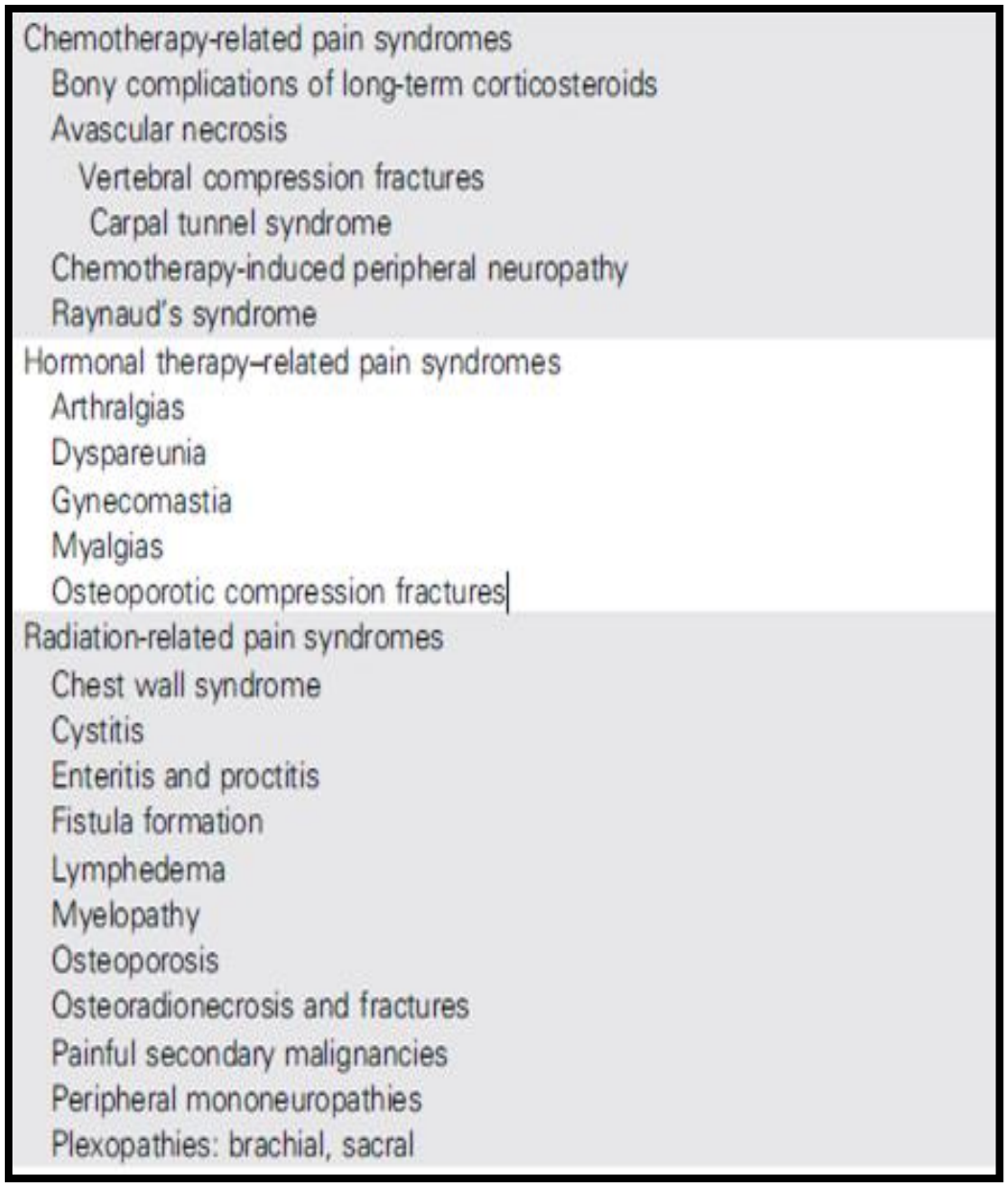
- Screening and Comprehensive Assessment (cancer treatment syndromes)
- Treatment and Care Options
- Risk Assessment, Mitigation and Universal Precautions



Key Recommendations

- **Screening and Comprehensive Assessment**
  - Screen at each encounter
  - Conduct initial comprehensive pain assessment
  - Be aware of chronic pain syndromes from cancer treatment
  - Evaluate for recurrent disease





Chronic Pain Syndromes Associated with Cancer Treatment

Paice JA, et al. *J Clin Oncol* 34:3325-3345,2016

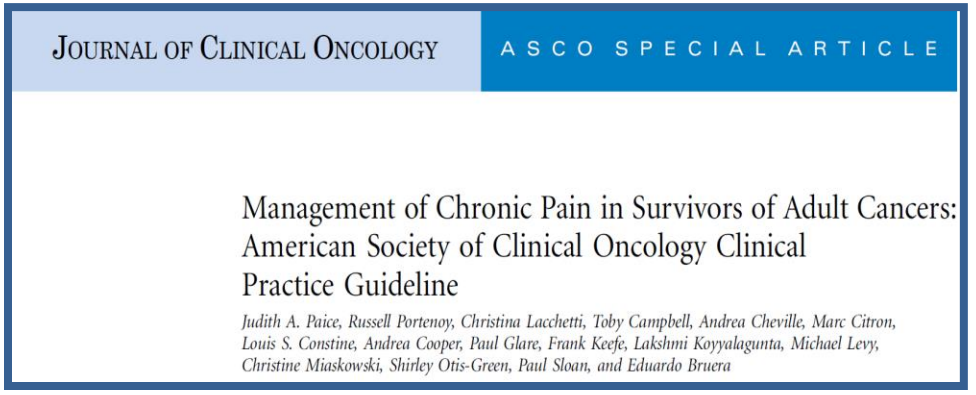
Stem-cell transplantation–mediated graft-versus-host disease
Arthralgias/myalgias
Dyspareunia, vaginal pain
Dysuria
Eye pain
Oral pain and reduced jaw motion
Paresthesias
Scleroderma-like skin changes
Surgical pain syndromes
Lymphedema
Postamputation phantom pain
Postmastectomy pain
Postradical neck dissection pain
Postsurgery pelvic floor pain
Post-thoractomy pain/frozen shoulder
Postsurgery extremity pain (eg, sarcoma)

Chronic Pain Syndromes Associated with Cancer Treatment

Paice JA, et al. *J Clin Oncol* 34:3325-3345,2016

Key Recommendations

- **Treatment and Care Options**
  - Non-pharmacologic interventions
  - Pharmacologic interventions
  - Opioids
    - Promote safe and effective prescribing
    - Assess risks of long term use



Nonpharmacologic Interventions

Table 4. Disciplines and Interventions for Chronic Pain

Disciplines	Examples of Possible Interventions	Strength of Evidence and Recommendation
Physical medicine and rehabilitation	Physical therapy, occupational therapy, recreational therapy, individualized exercise program, orthotics, ultrasound, heat/cold	Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate
Integrative therapies	Massage, acupuncture, music	Evidence-based; benefits outweigh harms; evidence quality: low; strength of recommendation: weak
Interventional therapies	Nerve blocks, neuraxial infusion (epidural/intrathecal), vertebroplasty/kyphoplasty	Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate
Psychological approaches	Cognitive behavioral therapy, distraction, mindfulness, relaxation, guided imagery	Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate
Neurostimulatory therapies	TENS, spinal cord stimulation, peripheral nerve stimulation, transcranial stimulation	Evidence-based; benefits outweigh harms; evidence quality: low; strength of recommendation: weak

Abbreviation: TENS, transcutaneous electrical nerve stimulation.

Paice JA, et al. *J Clin Oncol* 34:3325-3345,2016

Persistent common adverse effects
Constipation
Mental clouding
Upper GI symptoms (pyrosis, nausea, bloating)
Endocrinopathy (hypogonadism/hyperprolactinemia)
Fatigue
Infertility
Osteoporosis/osteopenia
Reduced libido
Reduced frequency/duration or absence of menses
Neurotoxicity
Myoclonus
Other changes in mental status (including mood effects, memory problems, increased risk of falls in the elderly)
Risk of opioid-induced hyperalgesia (incidence and phenomenology uncertain, but escalating pain in tandem with dose escalation raises concern)
Sleep-disordered breathing
Increased risk of concurrent benzodiazepine in patients predisposed to sleep apnea
New-onset sleep apnea
Worsening of sleep apnea syndromes

Adverse Effects Associated with Long-Term Opioid Use

Paice JA, et al. *J Clin Oncol* 34:3325-3345,2016

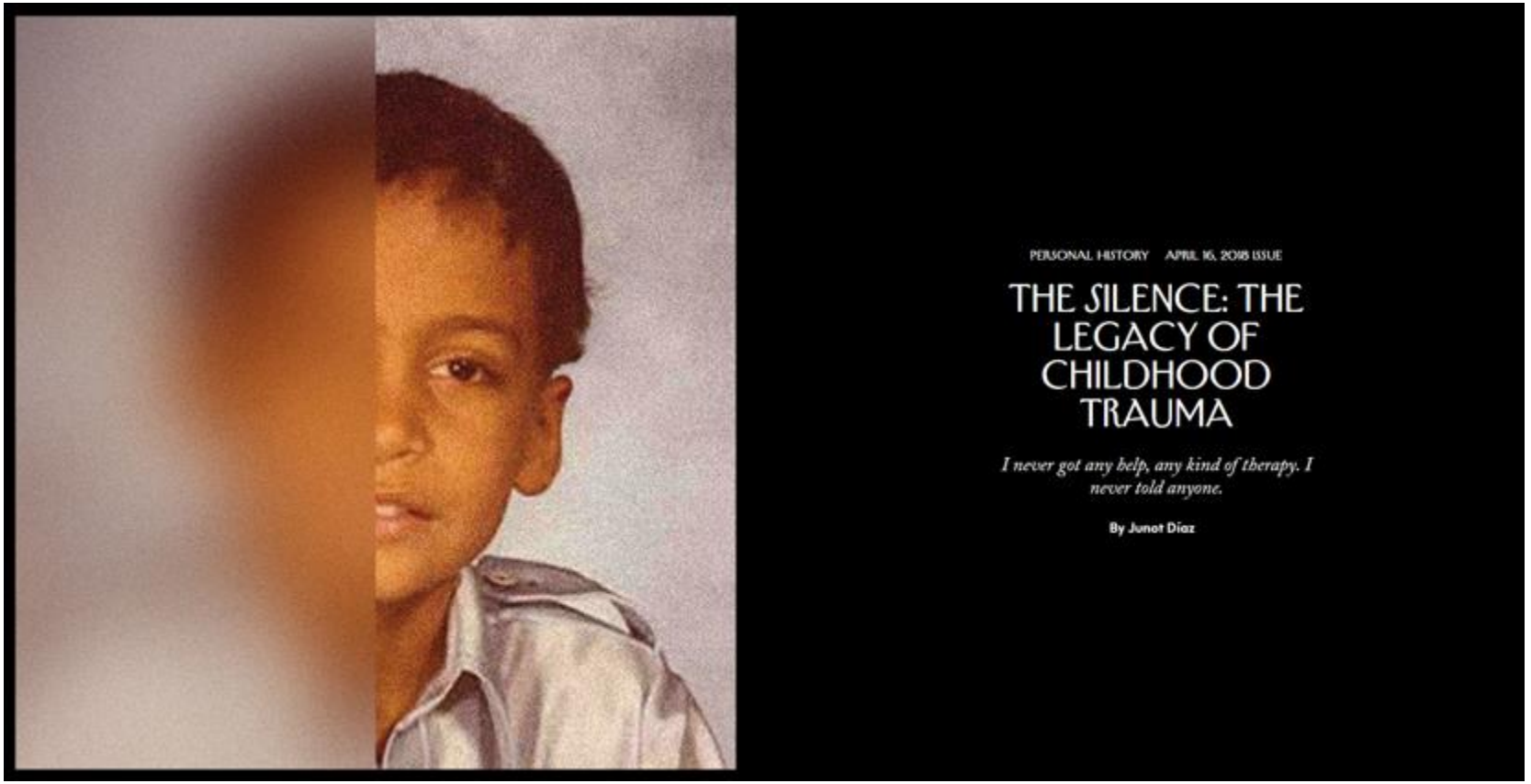
Key Recommendations

- **Risk Assessment, Mitigation and Universal Precautions**
  - Understand tolerance, dependence, abuse and addiction
  - Incorporate "universal precautions" to minimize abuse, addiction and adverse effects
  - Understand pertinent laws and regulations
  - Taper dose when no longer needed

Risk Assessment

- Pain
- Function
- Misuse/abuse of drugs
  - Current/past misuse of prescription or illicit drugs
  - Alcohol, smoking, gambling
- Environmental/genetic exposure
  - Family, friends with substance misuse disorder
- Sexual abuse

Blackhall LJ, et ak. Screening for substance abuse and diversion in Virginia hospices. *J Palliat Med* 2013;16(3):237-242.
Dev R, et al. Undocumented alcoholism and its correlation with tobacco and illegal drug use in advanced cancer patients. *Cancer* 2011;117(19):4551-4556



https://www.newyorker.com/magazine/2018/04/16/the-silence-the-legacy-of-childhood-trauma

Universal Precautions

- Prescription Drug Monitoring Programs
- Pill counts
- Urine toxicology
- Agreements/contracts

Starrels JL, et al. Systematic review: treatment agreements and urine drug testing to reduce opioid misuse in patients with chronic pain. *Ann Intern Med* 2010;152(11):712-720.

Universal Precautions

- Assess and stratify risk of opioid misuse
- Decide whether or not to prescribe
- Minimize risk
  - Optimize adjuvant analgesics, non-pharmacologic therapies, integrative approaches
  - Psychological support for treatment of mental illness, anxiety, depression, sleep disorders
- Monitor drug-related behaviors
- Respond to aberrant behaviors

When Opioids are No Longer Beneficial: Weaning

- Slow downward titration – 10% reduction/week
- Offer psychosocial support
- Optimize nonopioids and adjuvant analgesics
- Use antidepressants rather than benzodiazepines to treat irritability and sleep disturbances
- Provide a clear verbal and written plan

The Management of Opioid Therapy for Chronic Pain Working Group. *VA/Dod Clinical Practice Guideline for Management of Opioid Therapy for Chronic Pain* Washington, DC; 2010.

Chou R, et al: Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. *J Pain* 10:113-30, 2009

Safe Storage & Disposal

- Educate patients/families regarding safe medication practices
  - Don't leave medications out
  - Lock boxes
- Primary sources of diversion
  - Thefts from pharmacies, drug distribution centers
  - Thefts from medicine cabinets
  - Internet
  - Smuggling
  - "Pill mills"

Safe Storage and Disposal

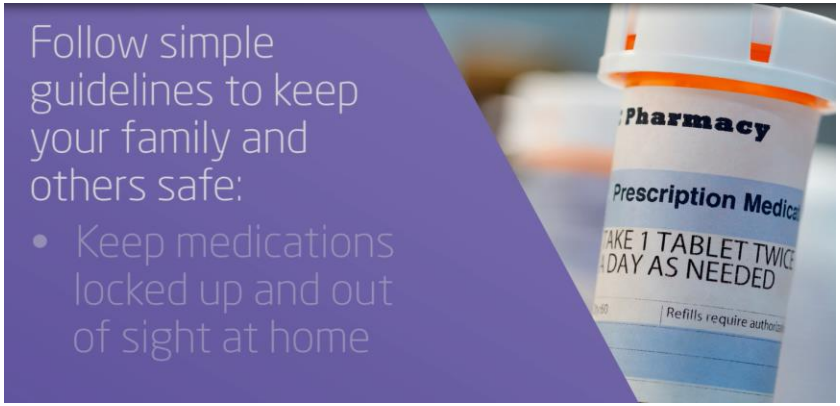
- Safe disposal
  - Take back programs – pharmacies, police depts
  - Mix drug in wet coffee grounds or kitty litter until dissolved, then dispose in garbage – do not flush down toilet (except opioids)

National Take Back Day:
April 28, 2018

www.deadiversion.usdoj.gov

Institutional Efforts

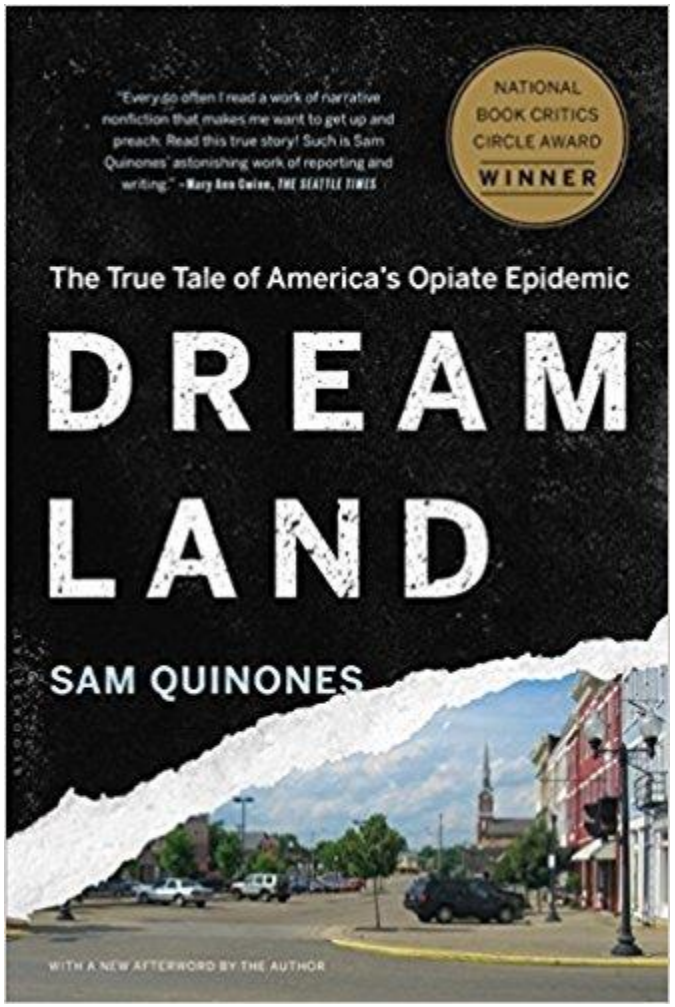
- Standardize universal precautions
  - Obtaining, processing urine samples
  - Prescription monitoring programs
  - Standardized "agreements"
  - Access to specialists
- Education – professional, patient, public
- Disposal programs

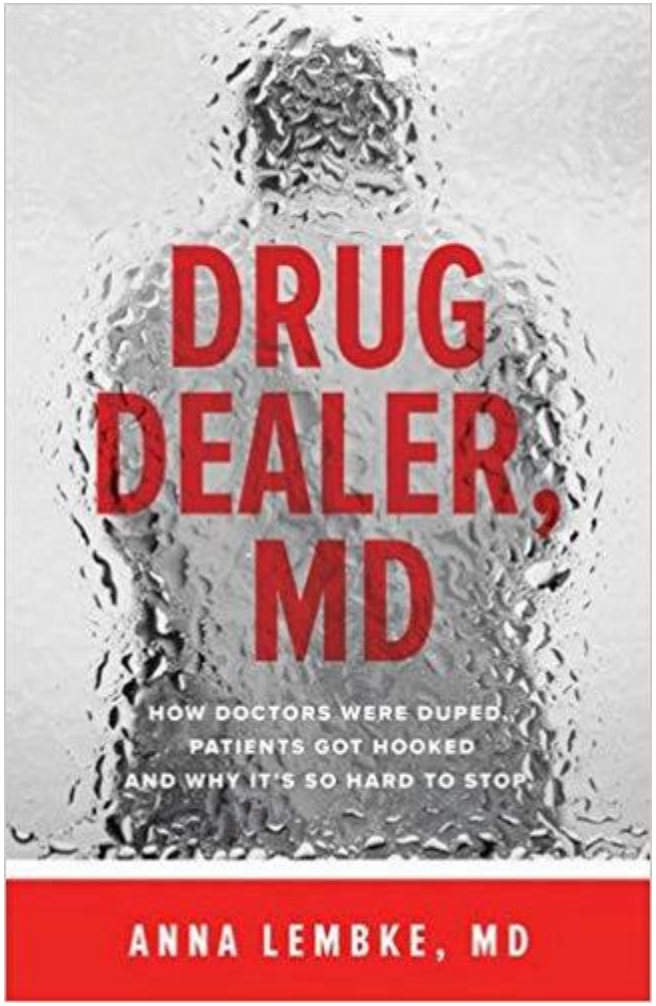


What Can We Do to Sustain Ourselves and Our Compassion?

- Learn about substance use disorders as chronic diseases
- Learn about long-term recovery and the recovery advocacy movement
- Be mindful of implicit stereotypes and biases
- Consider the impact of words and behaviors
- Talk with experienced colleagues about how to move from frustration and mistrust to realistic engagement
- Learn and practice motivational interviewing
- Do not worry alone – find support to help you manage yourself and your patients
- Seek help if you or a loved one is in trouble

https://www.chicagohan.org/opioids


"Every so often I read a work of narrative nonfiction that makes me want to get up and preach. Read this true story! Such is Sam Quinones' astonishing work of reporting and writing." –Mary Ann Gwinn, THE SEATTLE TIMES
NATIONAL BOOK CRITICS CIRCLE AWARD
WINNER
The True Tale of America's Opiate Epidemic
DREAM LAND
SAM QUINONES
WITH A NEW AFTERWORD BY THE AUTHOR


DRUG DEALER, MD
HOW DOCTORS WERE DUPED, PATIENTS GOT HOOKED AND WHY IT'S SO HARD TO STOP
ANNA LEMBKE, MD

Summary

- All patients should have thorough assessment
  - Pain, function, risk factors
- Multimodal therapy
  - Pharmacologic and nonpharmacologic interventions
- Employ universal precautions when using opioids
  - Ongoing assessment
  - Urine toxicology, pill counts, PDMPs
- Wean gradually when opioids no longer effective
- Safe storage and disposal

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has".

Margaret Mead