The OHN and the opioid epidemic: What can we do?

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Learning Outcomes

1. Describe categories of Opioids as the #1 Health Problem in the U.S.

2. Review national statistics related to opioid use, overdoses, and deaths

3. Explore factors that have contributed to the current opioid epidemic

4. Identify changes in the Center for Disease Control and Prevention (CDC) guideline for prescribing opioids

5. Discuss the role of the OHN and the AAOHN Position Statement on Opioids
Opioids - 3 categories of pain-relieving drugs:

1. **Natural opioids (Opiates)** - derived from the opium poppy, such as morphine and codeine;

2. **Semi-synthetic opioids** - hydrocodone, oxycodone, and heroin;

3. **Synthetic opioids** - methadone, tramadol, and fentanyl.
   - **Fentanyl** - 50 - 100 times more potent than morphine.
   - **Fentanyl analogues (Carfentanil)** - 10,000 times more potent than morphine.
   - Overdose deaths from fentanyl greatly increased since 2013 with illicitly-manufactured fentanyl.
Carfentanil

**Opioid Potency**

- Carfentanil: 10,000x
- Fentanyl: 100x
- Heroin: 2x
- Morphine: 1x
Acute Vs. Chronic Pain

Opioids

• Can be highly effective for treatment of acute pain (post-surgical)

• Little or no evidence for effectiveness in the treatment of chronic pain

• Can actually worsen pain through a phenomenon known as Opioid-induced hyperalgesia (OIH) -
  • State of nociceptive (nerve) sensitization caused by exposure to opioids
  • Characterized by a paradoxical response that could cause more sensitivity to certain painful stimuli
US #1 Health Problem

• 2001: “Substance abuse (alcohol, tobacco, and illicit substances) - cited as the US #1 health problem

• 2009: National Center on Addiction and Substance Abuse (CASA) - total annual costs of substance use annual costs - nearly half a trillion dollars (2005 Data).

• 2011: CASA - “Adolescent Substance Use: US #1 Public Health Problem.”

• 2011: Office of National Drug Control Policy (ONDCP) - non-medical use of prescription medications “the nation’s fastest-growing drug problem.”

• 2015: From 1999 to 2013, the rate for drug poisoning deaths involving opioid analgesics nearly quadrupled (CDC).

• March, 2015: US DHHS sets priorities/strategies

• August, 2015: US Surgeon General letter to Physicians
US #1 Health Problem

- October, 2015: President Obama - efforts to address epidemic

- 2016: OD deaths involving Rx and illicit opioids doubled from 2010 to 2016, with more than 42,000 deaths in 2016 (CDC).

- 2017: Drug OD deaths rose steadily over past two decades, with drug poisonings propelling unintentional injuries to be 3rd cause of all US deaths (CDC).

- 2017: Over past few years, the opioid death toll has been exacerbated by other synthetic opioids, most notably illicit fentanyl and heroin (CDC).

- 2017: Half of Opioid deaths - prescription opioid

- 2017: Deaths related to heroin have quadrupled between 2010 and 2015, similar to the rate of opioid overdose deaths between 1999 and 2015 (CDC).
US #1 Health Problem

• October, 2017: The Trump administration declared a public health emergency. While additional finances were not allocated, federal agencies have assigned resources to mitigate the epidemic.

• Total US economic burden from opioid misuse - average of $78.5 billion/year; $92 billion in 2016 from health care, lost productivity, addiction treatment, and criminal justice costs.

• March, 2018: Congress passed a federal spending bill to includes a $3.3 billion increase in funding to support prevention, treatment, and law enforcement activities across entities that help state and local governments.

• 4/5 Heroin addicts started out by misusing prescription opioids
DHHS Recognition of a National Epidemic
(March, 2015)

- U.S. DHHS prioritized activities to address the opioid abuse epidemic.

- Released Issue Brief describing evidence-based priorities

- The initiative focused on two broad goals:
  1) reducing opioid overdoses/overdose-related mortality, and
  2) decreasing the prevalence of opioid use disorders

- Highlighted the development of an evaluation to identify the most effective strategies for obtaining the greatest public health impact.
Letter from Vivek Murthy, MD, MBA 19th U.S. Surgeon General (August, 2015)

“I am asking for your help to solve an urgent health care crisis facing America: the opioid epidemic…we arrived at this place on a path paved with good intentions. Nearly two decades ago, we were encouraged to be more aggressive about treating pain, often without enough training and support to do so safely. This coincided with heavy marketing of opioids to doctors. Many of us were even taught—incorrectly—that opioids are not addictive when prescribed for legitimate pain…The results have been devastating…”
“it is important to recognize that we arrived at this place on a path paved with good intentions” and that nearly twenty years ago, “we were encouraged to be more aggressive about treating pain, often without enough training and support to do so safely.”

Murthy believes that that aggression, combined with heavy marketing of opioids to physicians, is what brought us to this stage.
Recognition of a National Epidemic
(October 21, 2015)

President Obama announced federal, state, local, and private-sector efforts at addressing the prescription drug abuse and heroin epidemic

• **ANA** was invited to participate along with more than 40 provider groups—**representing doctors, dentists, APRNs, physician assistants (PAs), physical therapists, and educators**

• As a result, over 540,000 health care providers committed to complete opioid prescriber training within two years
  1. Prescriber training to federal health care professionals who prescribe controlled substances
  2. Improving access to treatment
  3. Identify barriers to Medication-Assisted Treatment (MAT) for opioid use disorders and developing action plans.
A Problem? Opioid Overdose Deaths

• In U.S., enough opioid prescriptions are written for every adult

• Now Opioids are the leading cause of accidental deaths, including motor vehicle fatalities

• Estimate for 2016 is 65,000 opioid overdose deaths
  • 178 deaths per day
  • 7 deaths per hour

• Increased numbers and percentages involve fentanyl and now carfentanil

Drug overdose deaths

*Estimate based on preliminary data
# Opioid Overdose Deaths (CDC, 2017)

**Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016**

- **Any Opioid**
- **Other Synthetic Opioids** (e.g., fentanyl, tramadol)
- **Heroin**
- **Natural & Semi-Synthetic Opioids** (e.g., oxycodone, hydrocodone)
- **Methadone**

**Deaths per 100,000 population**

Contributing Factors

- Lack of adequate training of health care providers on pain, addictions

- Marketing
  - Pharma to physicians: promotion of opioid medications as safe, non-addictive if used for pain
  - Unscrupulous “pill mills”
  - “Black tar” heroin - cruder, just as pure as illicit opioids
  - Conversion from opioid medications (licit or illicit) to use of heroin

- Pain as the 5th vital sign
  - Patient satisfaction surveys
  - Lack of support for research for non-opioid pain relief
  - Refusals by insurance companies to approve or pay for other forms of treatment
  - Sociocultural factors
Professional Organizations and Government Agencies Respond
NI OSH
Opioids and Workplace Risk Factors

• Opioids - often prescribed for a work injury. Risky workplace conditions that lead to injury can be associated with prescription opioid use.

• Higher opioid overdose death rates among workers in industries and occupations with high rates of work-related injuries and illnesses.

• Other employment factors (job insecurity/loss, high-demand/low-control) - associated with prescription opioid use. Some employees may misuse/develop dependence.

• Prescription opioid misuse may also lead to heroin use.

• Higher rates in jobs without paid sick leave/lower job security, suggesting early RTW may contribute to high rates of opioid-related overdose death. Lack of paid leave/lower job security may cause reluctance to take time off for treatment.
Naloxone hydrochloride

Naloxone, NARCAN® or EVZIO® - a drug that can temporarily stop many of the life-threatening effects of overdoses from opioids.

- Very effective drug for reversing opioid overdoses.
- Helps restore breathing and reverse the sedation and unconsciousness common with opioid overdose.

Side effects

- Serious side effects - very rare. Benefits outweighs the Risks.
- Rare - Acute opioid withdrawal symptoms such as body aches, increased heart rate, irritability, agitation, vomiting, diarrhea, or convulsions.
- Allergic reaction - very uncommon.
- Given if unknown cause of unconsciousness.
Naloxone hydrochloride

Limitations

• Will not reverse overdoses from other drugs, such as alcohol, benzodiazepines, cocaine, or amphetamines.

• More than one dose of naloxone may be needed to reverse some overdoses.

• Naloxone alone may be inadequate if someone has taken large quantities of opioids, very potent opioids, or long acting opioids.

• For this reason, call 911 immediately for every overdose situation.
Naloxone

- Police officers, emergency medical services providers, and non-emergency professional responders carry the drug for that purpose.
- The US Surgeon General urges others who may encounter people at risk for opioid overdose to have naloxone available and to learn how to use it to save lives [USSG 2018].
Considering a Workplace Naloxone Program

- Any person at a workplace is at risk of overdose if they use opioids.
- Call 911 immediately for suspected OD. OD without immediate intervention can quickly lead to death.
- Consider making naloxone available in the event of an overdose.
- Considerations to help decide whether a program is needed or feasible:
Consider a Workplace Naloxone Program

- Your state allows administration by non-licensed providers for an overdose emergency; Liability and legal considerations to be addressed - Good Samaritan Law to cover emergency naloxone administration;
- Staff - willing to be trained/ provide naloxone;
- Experienced opioid overdose or had evidence of opioid drug use onsite (finding drugs, needles or other paraphernalia);
- Emergency response personnel access to workplace;
- Add naloxone to existing first aid/ emergency response interventions (first aid kits, AEDs, trained first aid providers)
Consider a Workplace Naloxone Program

- Greater opioid OD risk in your geographic location. (The National Center for Health Statistics provides data)
- Are the risks for opioid overdose greater in your industry or among occupations at your workplace? [See MDPH 2018 and CDC 2018c.]
- Workplace visitors, clients, patients, or other members of the public that may be at increased risk of opioid overdose?
- Review the above questions periodically even if a program is not established right away.
- Ideally, a naloxone program is but a part of a more comprehensive workplace program on opioid awareness and misuse prevention.
Dosage Recommendations

The dosage recommendations for exercising caution are lower than previous opioid prescribing guidelines.

Higher doses of opioids are associated with higher risk of overdose and death—even relatively low doses (20-50 morphine milligram equivalents (MME) per day) increase risk.
Assessing Risks and Harms

Previous guidelines focused safety precautions on “high risk patients,” however, opioids pose risk to all patients, and currently available tools cannot rule out risk for opioid use disorder or other serious harm.

The CDC Guideline provides recommendations on providing safer care for all patients.

The Guideline also encourages use of recent technological advances, such as state prescription drug monitoring programs.
Monitoring and Discontinuing

The Guideline provides more specific recommendations compared to previous guidelines on monitoring and discontinuing opioids when risks and harms outweigh benefits.
Clinical Reminders

- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of non-opioid therapies with patient
- Use immediate-release opioids when starting
- Start low and go slow
- When opioids are needed for acute pain, prescribe no more than needed
- Do not prescribe ER/ LA opioids for acute pain
Clinical Reminders

• Follow-up and re-evaluate risk of harm/ opioid-related risk factors

• Check PDMP for high dosages and prescriptions from other providers

• Use urine drug testing to identify prescribed substances and undisclosed use

• Avoid current benzodiazepine and opioid prescribing

• Reduce/ taper dose and discontinue if needed

• Arrange treatment for opioid use disorder if needed
CDC Clinician Outreach and Communication Activity (COCA)

- Public education to promote safe handling, storage and appropriate disposal of medications, particularly controlled substances
- Wider Dissemination of FDA-approved Medication Guides for Opioid Analgesics
- Obtain Informed Consent
- Use Electronic Prescribing for Controlled Substances
- Limit the Duration of the 1st Opioid Prescription
- Use Prescription Drug Monitoring Programs (PDMPs)
- Require Demonstrated Competence for Opioid Prescribing
- Expand the Use of Naloxone
- Expand Access to Medication-Assisted Treatment (MAT) for Opioid Use Disorder
- Encourage Adoption of Abuse-Deterrent Formulations
ANA Opioid Resources

To aid in managing and reducing the opioid epidemic, ANA created a series of resources:

- Best practices,
- Overview of the role of ineffective pain management in fueling the opioid epidemic, and
- Proposals for how the situation can be improved on a national level.
Critical Contribution in Nursing

• Often best equipped to assess a patient’s pain and need for pain relief;
• On the front lines of the opioid epidemic;
• Lead the way in an attitudinal transformation toward pain management;
• Key positions to help patients and their families understand the risks and benefits of pain treatment options;
• Educators and patient advocates help with non-opioid pain management including other medication modalities, regional anesthetic interventions, surgery, psychological therapies, rehabilitative/physical therapy, and complementary and alternative medicine (CAM).
Critical Contribution in Nursing

- Advanced Practice Registered Nurses (APRNs) - education (incl advanced pharmacology) prepare them to assume responsibility and accountability for assessment, diagnosis, and management of patients’ problems (incl use/ prescription of pharmacologic interventions).

- Changes to the Controlled Substances Act allows APRNs with appropriate training to prescribe buprenorphine which significantly increases access to medication-assisted treatment for patients who need it.

Buprenorphine - used in medication-assisted treatment (MAT) to help people reduce or quit their use of heroin or other opiates, such as pain relievers like morphine.
Some Effective Treatment Modalities

- Not limited to
  - Non-addictive meds
  - Mindfulness
  - Yoga
  - Healing touch

- But, these approaches
  - Take time
  - Require commitment and patient participation
  - May not completely eliminate pain
AAOHN joins ANA in acknowledging the Central Role of the Nurse

• Lead efforts in ensuring workplaces are safe and support the health of employees, employers, and their families

• Epidemic poses unique challenge for employers with the potential for significant impact in the workplace with serious risks to employees and substantial costs for employers (National Safety Council (NSC), 2015).

• Challenges unique to opioid use in the workplace include:
  • health and safety risks,
  • increased costs to healthcare,
  • increased costs to benefits such as disability, work comp, and EAPS and
  • impact on productivity.

American Association of Occupational Health Nurses
AAOHN joins ANA in acknowledging the Central Role of the Nurse

- Workers using opioids > a week to treat on-the-job injuries have double the risk of being disabled one year later (NSC).
- More difficult to detect opioid use than other drugs (alcohol or marijuana); Difficult to make the connection between performance and attendance and drug use.
- The NSC calls on employers to develop workplace policies regarding opioid prescription painkillers use to help protect injured workers and mitigate liability, stating that “employers have a moral and legal responsibility to protect employees”.

American Association of Occupational Health Nurses
AAOHN joins ANA, AACN, ACEP, etc

• Raising awareness through educational initiatives among the general public as well as healthcare providers,
• Recognizing that opioids are inherently dangerous, highly addictive drugs with significant abuse potential,
• Improving and standardizing opioid prescriber training
  • offering other pain treatment modalities,
  • discussing realistic function and pain management goals,
  • exploring potential risks and side effects,
  • screening for abuse and co-morbidities,
  • prescribing buprenorphine for treatment, and
  • facilitated referrals for treatment and recovery

American Association of Occupational Health Nurses; American Association of Critical Care Nurses; American College of Emergency Physicians
AAOHN joins ANA, AACN, ACEP, etc

• Programs to monitor opioid use and prevent inappropriate access to prescription opioids,

• Instituting standing orders to allow rapid treatment of opioid overdose and increased access to opioid antagonists (naloxone) in the workplace, community centers, and homes for family, friends, and caregivers of known chronic opioid users, and

• Increasing access to harm reduction agencies, community programs, and medication-assisted treatment programs.

• A multifaceted approach is necessary to reduce opioid morbidity and mortality (Kolodny, et al., 2015).
AAOHN joins ANA, AACN, ACEP, etc

• OHNs are skilled in assessing, diagnosing, and managing workers who are at risk for injury or addiction, related to opioid use and are well-positioned to lead efforts to prevent opioid-related injury, dependence, overdose and death. OHNs should be actively involved in their workplaces, collaborating with employers in (Wong, 2017):
  • Review existing workplace drug testing policies,
  • Create educational initiatives,
  • Implement policy and disciplinary actions, and drug testing procedures
  • Evaluate potential legal implications for ADA-compliant drug testing procedures and ensuring compliance with ADA laws and regulation to avoid disability discrimination claims,
  • Ensure benefit and work comp carriers have programs for use of prescription opioids, opioid/prescription benefit management to identify and prevent prescription abuse, and EAPs to help employees avoid or address addiction.
AAOHN joins ANA, AACN, ACEP, etc

- OHN case management - ensure collaboration among the prescribing provider and the worker regarding safe job performance and alternative treatment regimens.
- Educational initiatives should involve OHNs and target workers, support personnel, and management:
  - Safe use of prescription opioids; not sharing medications;
  - Risk of dependency and addiction;
  - Sources of assistance (EAPs, quality community addiction programs using evidence-based treatment regimens);
  - Opioid safety at home (secure storage and disposal of meds, avoid mixing meds with alcohol, sedatives, or psychotherapeutic meds);
  - Signs of dependency and opioid misuse (drowsiness, problematic attendance, depression, concentration problems, anxiety, and mood swings);
  - Training for managers on identifying impaired employees and recognizing signs of dependence and opioid misuse.
ACOEM Medical Guidelines
Opioid Treatment Agreement

Patient Name (Print): ________________________________
Prescriber Name (Print): ________________________________
Medical Condition requiring Opioid: ________________________________
Planned Opioid Medication: ________________________________

I (patient) understand the following (initial each):

_____ I understand this agreement applies to opioid medications. Some of the common examples include but are not limited to oxycodone (e.g., Percocet), hydrocodone (e.g., Vicodin, Lortab), Hydromorphone (Dilaudid), morphine, fentanyl (e.g., Actiq), codeine (e.g., Tylenol with codeine), methadone, tramadol (e.g., Ultram), and buprenorphine (Suboxone or Subutex).

_____ I understand that opioids are prescribed to see if they increase my function including my ability to work, perform household chores, or otherwise regain activities.

_____ I understand that opioids are only one part of my treatment program.

_____ I understand that opioids may slightly reduce pain levels. Most studies report this as approximately 1/10, or in other words, from a pain level of “6 out of 10” to “5 out of 10.” Opioids will NOT eliminate chronic pain and are unlikely to produce major improvements in pain.

_____ I understand that opioid medications have all of the following reported adverse effects (see Table 1a). Many, but not all of these risks increase with higher doses.

_____ I have had an opportunity to discuss these risks with my prescriber. I accept these risks.
ASPMN Position Statement: Pain Management in Patients with Substance Use Disorder

• “It is the position of ASPMN and IntNSA that every patient with pain, including those with substance use disorders, has the right to be treated with dignity, respect, and high-quality pain assessment and management.”


American Society for Pain Management Nursing
IntNSA Position Paper: The Prescribing of Buprenorphine by Advanced Practice Addictions Nurses

• “In order to increase safe access to buprenorphine treatment for patients with opioid dependence, it is the position of the International Nurses Society on Addictions (IntNSA) that the Drug Addiction Treatment Act of 2000 (DATA 2000) to be amended to allow for the prescribing of buprenorphine by qualified advanced practice nurses who have both prescriptive authority and specialty certification in addictions nursing.”


More on Substance Use Among Nurses and Nursing Students

Substance Use Disorders Among Nurses and Nursing Students

Help for Nurses and Nursing Students with Substance Use Disorder
ANA recognizes that a nurse's duty of compassion and caring extends to themselves and their colleagues as well as to their patients. Nurses who are challenged with substance use disorder (SUD) not only pose a potential threat to those for whom they care; they are not caring for themselves.

According to the HHS, SUD refers to substance use and/or substance dependence: It is the damaging use of harmful substances, including alcohol, marijuana, opioids, and other drugs.

ANA and many of our organizational affiliates, including the International Nurses Society on Addictions, the Emergency Nurses Association, and the American Association of Nurse Anesthetists, strongly support alternative to discipline programs offered by nurses’ associations, state boards of nursing, and others. These programs offer comprehensive monitoring and support services to reasonably assure the safe rehabilitation and return of the nurse to her or his professional community. In 2017, ANA and AANA endorsed IntNSA and ENA’s position statement [link to statement]. Please view this statement in its entirety to gain valuable insight on the description and background on this issue. ANA thanks the members of AANA’s Substance Use Disorder Workgroup [link to page where members & affiliations will be listed] which was a collaboration of subject matter experts, constituent/state nurses associations, organizational affiliates, and other interested parties engaged to assist with updating ANA SUD policy and resources. Additionally, the following three national nursing organizations contributed to these webpages with their policy and leadership.

Position statement now endorsed by
- American Nurses Association (ANA)
- American Association of Nurse Anesthetists (AANA)
- American periOperative Registered Nurses (AORN)

Disseminated by the National Council of State Boards of Nursing (NCSBN)

ANA Substance Use in Nursing Work Group

Created landing page on ANA website: “Help for Nurses with Substance Use Disorder,” with links to information and resources

IntNSA President (Strobbe)
- invited to serve on AANA Peer Assistance Advisory Committee (PAAC)
- invited to present webinar on opioid epidemic to AAOHN, January 2018
- invited to address Global Summit for AORN, March 2018
Purdue Pharma – Manufacturer of Opioids

- Public education to promote safe handling, storage and appropriate disposal of medications, particularly controlled substances
- Wider Dissemination of FDA-approved Medication Guides for Opioid Analgesics
- Obtain Informed Consent
- Use Electronic Prescribing for Controlled Substances
- Limit the Duration of the First Opioid Prescription
- Use Prescription Drug Monitoring Programs (PDMPs)
- Require Demonstrated Competence for Opioid Prescribing
- Expand the Use of Naloxone
- Expand Access to Medication-Assisted Treatment (MAT) for Opioid Use Disorder
- Encourage Adoption of Abuse-Deterrent Formulations
What Can Nurses Do?

- Clean out medicine cabinets, discarding expired and unused medications
- Examine our attitudes on substance use and addiction, and those affected by it
- Recognize substance use disorder as a treatable disease
- Employ non-opioid pain relief strategies
- Help shape responsible prescribing practices
- Learn about naloxone: what it is, when to prescribe it, and how to administer it ourselves in the event of an overdose
- Be alert to occupational risks for substance use among employees, nurses, and students
- Advocate for prevention, early intervention, retention, treatment, and recovery
AAOHN Conclusion

• In April 2017, The US DHHS outlined 5-point Opioid Strategy, provides framework to leverage the expertise and combined resources of federal agencies in a strategic and coordinated manner (Federal Efforts to Combat the Opioid Crisis, 2017). The comprehensive, evidence-based Opioid Strategy aims to:

• Improve access to prevention, treatment, and recovery support services to prevent the health, social, and economic consequences of opioid addiction and to enable long-term recovery;

• Target availability/distribution of OD-reversing drugs for people likely to OD (high-risk);

• Strengthen public health reporting to improve timeliness and specificity of data for a real-time PH response as the epidemic evolves;

• Support research for understanding pain and addiction, leading to developing new treatments, and identifying effective PH interventions to reduce opioid-related health harms; and

• Advance pain management to access to high-quality, evidence-based care reducing the burden of pain for all while reducing the inappropriate use of opioids and opioid-related harms.
AAOHN Conclusion

• OHNs are well positioned to lead the efforts in the fight against opioid dependence.

• Provide employee training and education,

• Identify and address opioid use and abuse in the workplace while ensuring confidentiality, and

• Advocate for comprehensive corporate policy making, comprehensive drug testing, and benefit programs.

• AAOHN is partnering with other occupational health, public health, and nursing organizations to create a multifaceted approach to reduce opioid morbidity and mortality.

• AAOHN recognizes the need for OHNs to be actively involved in their workplaces, and is providing information and resources (e.g., educational initiatives, governmental advocacy and policy implementation) to support OHNs in promoting a safe work environment for themselves, workers, employers, and their families.
References


References


References


