The Opioid Epidemic: Improving Opioid Safety for Patients through Prescriber, Patient & Family Education

Sharon Wrona, DNP, RN-BC, PNP, PMHS, AP-PMN

Disclosures

- Sharon Wrona DNP, RN-BC, PNP, PMHS, AP-PMN
  - Awarded Cardinal Health Generation RX grant for Reduction of Opioids Prescribed for Pediatric Patients and Improving Opioid Safety Education
  - Has disclosed that she has no other conflict of interest

Objectives

- The learner will be able to list the statistics on opioid misuse and abuse in the US.
- The learner will identify the new 2018 Joint Commission standard on pain management that impact opioid safety.
- The learner will be able to identify opportunities to place in practice to improve safe opioid prescribing and education for patients
Opioid Epidemic

• According to the CDC, the number of opioid prescriptions sold within the United States has quadrupled since 1999, yet the amount of pain American’s report has not significantly improved.

• The number of Hydrocodone and Oxycodone prescriptions are increasing at a dramatic rate. The U.S. is currently the largest consumer in the world, accounting for nearly 100% of Hydrocodone prescriptions (National Institute on Drug Abuse, 2014).

• The total number of opioid prescriptions throughout the United States would be enough to give every American adult 1 bottle of opioids.

Prescription trends vary by state

National Survey on Drug Use and Health - 2015

• Prescription Drug Misuse
  – Any way not directed by a doctor(prescriber), including use without a prescription of one’s own; use in greater amounts, more often, or longer than told to take a drug, or use in any other way not directed by a doctor(prescriber).

• Currently ~ 3.8 million people ages 12 yr. or older misuse pain medications
  – 1.4% population
National Survey on Drug Use and Health - 2016

SAMHSA (2016) Key substance use and mental health indicators in the US: Results from the 2015 National Survey on Drug Use and Health.
Pain relief

There is a mismatch between the amount of opioids needed to treat pediatric acute pain, with children using less than 50% of prescribed opioids.

- The leading sources of prescription opioids among adolescent nonmedical users are from their peers and from their own previous prescription opioids.

- Leftover prescription opioids from previous prescriptions account for a substantial source of nonmedical use of prescription opioids among high school seniors.

- 8 out of 10 adolescents who report misusing prescription opioids report that their access to these drugs comes from leftover prescriptions from friends and family members.

Normal Teen to Heroin Addict
How Does it Happen?

Progression of Use

Tyler’s light

https://www.youtube.com/watch?v=j-9Z0pXbtvI.

Opioid use can turn deadly.

https://www.youtube.com/watch?v=j-9Z0pXbtvI.
Opioid RX Laws across the US

CDC Guideline for Prescribing Opioids for Chronic Pain – United States, 2016

Summary

This guideline makes recommendations to providers on criteria for prescribing opioids for chronic non-cancer pain treatment that are consistent with current national practice and evidence. The guideline uses evidence-based criteria to avoid overprescribing opioids and to ensure that patients are treated with the most effective, least risky treatment options available. The guideline is based on a comprehensive review of the available evidence and expert opinion. The guideline is intended for use in healthcare settings where opioids are prescribed for chronic non-cancer pain treatment and where evidence-based guidelines are not available. The guideline is not intended for use in settings where opioids are prescribed for acute or cancer pain treatment.

State Opioid Laws & Prescribing Limits

State Legislations That Currently Limit Opioids

Legislators are taking notice of the opioid epidemic in the United States and are enacting laws to limit opioid prescriptions in an effort to reduce opioid misuse and abuse. Some states have already enacted legislation to limit opioid prescriptions. These laws vary in their approach and effectiveness, but they are intended to curb the epidemic. Some examples include:

- Connecticut
- Maine
- Rhode Island
- Virginia

Ohio Opioid Epidemic

Figure 5: Number of Unintentional Overtures Involving Selected Drugs, by Year, Ohio, 2000-2015

*Prescriptions are not filling similar intent. Data not reported for the drug oxycodone due to low volume. Source: The Department of Health, Substance Abuse and Addiction Collaborative on Opioid Prescription Paper. Multiple drug use and accidental overdose death. Individual death may be related to one or more drugs.
In the news…..

Physician’s Murder Highlights Risk of Saying ‘No’ to Opioids

The 56-year-old doctor was found dead in his home with fentanyl in his system. According to reports, the doctor had been prescribed fentanyl by another physician.

The doctor’s death highlights the risk of saying “no” to opioids, particularly for patients in pain management. It is important to have clear communication and education for patients and providers about the proper use of opioids.

DEA Proposes Significant Cuts to Opioid Production in 2018

The Drug Enforcement Administration (DEA) is proposing significant reductions in the production of opioids in 2018. The proposal aims to reduce the production of opioids by 41 percent in 2018, which is the largest reduction in production under the DEA’s control.

The proposal is in response to the ongoing opioid crisis and aims to reduce the supply of opioids while maintaining adequate supply for legitimate medical purposes. The proposal also includes changes to the scheduling and distribution of opioids, as well as increased efforts to combat opioid diversion and abuse.

2018 Joint Commission Pain Management Standards

- Standard LD.04.03.13
  - Pain assessment and pain management, including safe opioid prescribing, is identified as an organizational priority for the hospital.
  - The hospital has a leader or leadership team that is responsible for pain management and safe opioid prescribing and develops and monitors performance improvement activities.
  - The hospital provides nonpharmacologic pain treatment modalities.
  - The hospital provides staff and licensed independent practitioners with educational resources and programs to improve pain assessment, pain management, and the safe use of opioid medications based on the identified needs of its patient population.
2018 Joint Commission Pain Management Standards

• Standard LD.04.03.13 – continued
  • The hospital provides information to staff and licensed independent practitioners on available services for consultation and referral of patients with complex pain management needs.
  • The hospital identifies opioid treatment programs that can be used for patient referrals.
  • The hospital facilitates practitioner and pharmacist access to the Prescription Drug Monitoring Program databases.

2018 Joint Commission Pain Management Standards

• Standard PC.01.02.07
  – The hospital assesses and manages the patient’s pain and minimizes the risks associated with treatment.
    • The hospital involves patients in the pain management treatment planning process through the following
      – Providing education on pain management, treatment options, and safe use of opioid and non-opioid medications when prescribed.
    • The hospital educates the patient and family on discharge plans related to pain management including the following:
      – Safe use, storage, and disposal of opioids when prescribed

2018 Joint Commission Pain Management Standards

• Standard PI.02.01.01
  – The hospital compiles and analyzes data.
    • The hospital analyzes data collected on pain assessment and pain management to identify areas that need change to increase safety and quality for patients.
    • The hospital monitors the use of opioids to determine if they are being used safely (for example, the tracking of adverse events such as respiratory depression, naloxone use, and the duration and dose of opioid prescriptions).
Why This Project?

- **1 in 5** high school students report lifetime misuse of prescription opioids.
- **70%** of misused opioids are from a friend or relative or getting them from their own prescriptions.
- In 2015, **> 40 people died each day in the U.S. from Rx opioids misuse**.

Why This Project at NCH?

We are contributing to the opioid epidemic in our communities.

- **< 25%** of Prescribers and Nurses at NCH discuss locking up and disposal of opioids.
- **No** formal process for opioid safety education.
- Post op appendectomy patients reported using only **~ 3 doses (30%)** of home going opioid prescribed for pain.
NCH Opioid Safety Initiatives

Nationwide Children’s Hospital started an Opioid Safety Task Force in January 2016 to look at ways we can improve opioid prescribing and education at NCH. The area of focus for the task force are:

• Prescribing practices
  – Do our patients need as much medication as we are prescribing them?
• Improve Education about pain management and opioid use
  – Prescribers
  – Nurses
  – Patients and families
• Opportunities to educate about safe storing and disposal of medications (including opioid)

NCH Opioid Safety Initiative

NCH prescribing practices over a 12 month period were reviewed.

For each home going script (inpatient and outpatient) there was an average of 25 doses ordered per prescription.
NCH Opioid Safety Initiative

The top opioid prescriptions were from H5A&B and H10B.
- Peds Surgery
  - Ruptured Appy Dx
- ENT
  - T & A Dx
- Orthopedics
  - Supracondylar fx and spinal fusion Dx

Opioid Safety Taskforce
Prescribing Initiative

Decrease the NCH wide* average number of opioid doses per home going opioid prescription by 10% from 25 doses to 22.5 doses by 7/31/2017 and sustain for 6 months.

Key Drivers
- Implement a tracking form or online app for Surgical patients to track doses taken
- Review data for doses taken with Surgical physicians
- E-prescribe opioids in Epic
- Implement a decision tree for pain treatment alternatives
- Develop a list of prescription drop box sites

*Exclude Hem/Onc Clinics, Pain Service, H11A, H12A/B, Apheresis, BMT Clinic, Eye Teams and Palliative Care, Complex Care Clinic, South High PC

Legitimate Opioid Prescription Increases the Risk for Future Opioid Misuse in Some Adolescents – Groenewald & Palermo (2016)

- Clinicians should consider the risk for future opioid misuse when prescribing opioids to adolescents.
- Nurses should educate adolescents and parents about the risk of opioid prescriptions.
- Leftover opioids from legitimate prescriptions are a major source of opioids misuse in adolescents.

Groenewald & Palermo. (2016). Evidence Based Nursing, 19(3)

- The Ohio Guidelines for Prescribing Opioids for the Management of Acute Pain Outside of the Emergency Departments recommend prescribe the minimum quantity needed with no refills based on each individual patient, rather than a default number of pills.
- The Ohio Guidelines for Emergency and Acute Care Facility Opioid and Other Controlled Substances (OCOC) Prescribing recommend except in rare circumstances, prescriptions for COCS should be limited to a three-day supply.

NCH has taken the GCOAT guidelines to develop guidelines at NCH for pain management:

**Minor Opioid Consent**

- By law in Ohio it is mandatory to have a Start Talking! Consent Form for Prescribing Opioids to Minors signed for all kids < 18 years of age if opioids prescribed for outpatient use (exclusion for surgery or emergency care).
Longer Term Opioid Use

Agreement with the patient/family
- Sets limits with controlled substances
- Gives way to document expectations of patient and parent.
- Not a legal binding agreement

Opioid Safety Taskforce
Prescribing and Education Initiative

**Aim**
Increase the percentage of patients prescribed chronic opioids that are engaged in a formal Opioid Risk Assessment for abuse/diversion from <5% to 75% by 12/31/2017 and sustain for 6 months.

**Key Drivers**
- Standardization of opioid misuse/diversion assessment
- Education of patients and families on risks for opioid misuse/diversion
- Proper education of practitioners on risk for misuse/diversion
Educating parents about possible misuse

Nurses Can Make a Difference with our Opioid Epidemic

Opioid Safety Taskforce
Prescribing and Education Initiative

**Aim**
Increase % of pts d/c from HSA/HSB/H10B Rx opioids that receive opioid safety education from 0% in 10/1/2016 to 50% by 7/31/2017 & then increase to 100% by 1/31/2018 & sustain for 6 mon.
Improve overall education to patients/families on opioid safety

**Key Drivers**
- Proper education of outpatient pharmacy staff
- Proper education of nurses
- Proper education of practitioners
- Proper education of patients and families
- Communication/documentation between team members

**Interventions**
- Healthcare Providers will use the Zero Hero "Wingman" approach for opioid safety
- Hospital Opioid Safety Website
- Hospital Pharmacy Bed-side Pharmacy Provides Opioid Safety Education
- Proper patient and families triaging tool for opioid safety
- Hospital Opioid Safety needs to support health literacy needs from triaging tool
- Proper link in Opioid Safety helping tool in pain management order set and D/C navigator
- Document Opioid Safety provided to patient/family on Discharge Navigator/Referral/Teaching Record

Zero Hero
Center of the Zero Hero
Opioid Safety Education for the Nurse

Online 0.5 CE module created for nurses at NCH

How Nurses Can Help

1. To help decrease the number of excess opioids in our community and ensure safe opioid practices.
   - Nurses can use the Zero Hero “Wingman” approach when reviewing opioid prescriptions.
   - Nurses can begin educating patients while in the hospital and at clinic visits.

2. Nurses can help address this significant public health problem by teaching families/patients how to Monitor, Secure, Transition, and Dispose opioid medication.

3. It is essential for nurses to begin educating patients on safe opioid practices as soon as possible in the hospital or at the clinic visit.

Zero Hero “Wingman”

To improve prescribing practices at NCH practitioners are being asked to prescribe the appropriate # of opioids needed for optimal pain management without over prescribing when guidelines suggest less medications.

- After reviewing opioids prescribed in home going Rx the average number of doses prescribed per Rx was 25 doses. The highest areas that Rx’s were being given were on several of the surgical floors at discharge from surgeries such as ruptured appendectomy, fractures, and ENT surgeries.
- These areas are looking at the # of doses given per Rx and calling families to find out how many of the doses were actually given. Using this data will help determine what # of doses may be appropriate for different surgical procedures.
Key educational points to remember for opioid education

1. Monitor
2. Secure
3. Transition
4. Dispose

MONITOR

• Every patient and parents should be instructed on the importance of taking the medication as directed and to try alternative pain management techniques first to reduce the risk of abuse and addiction.

  Alternative pain management techniques include:
  - deep breathing
  - distraction
  - acupuncture/acupressure
  - massage therapy
  - non-opioid medications (acetaminophen, ibuprofen, or other pain medications prescribed by physician)
  - splinting of the incision
  - aromatherapy
  - ice/heat
  - positioning
  - directed exercise such as physical therapy

MONITOR

• It is important to instruct individuals to keep a record of when they take their prescribed opioid medication.
• Due to the increase in opioid abuse in our community it is important to be aware of “seekers”. A seeker is someone looking to steal opioid medications.
  - A “seeker” can be a sibling, relative, friend, neighbor, or a stranger.
MONITOR

- Instruct patients, or parents to discuss with their child, that they should avoid talking or sharing with friends, relatives, etc. what medications they are prescribed.
- It is illegal to share (give) medications that are prescribed with someone else.
- The majority of individuals who use opioids for non-medical reasons report receiving the medication from a family member or friend, not a physician.

SECURE

According to Partnership for Drug-Free Kids, only 20% of prescribers regularly provide education to patients on how to secure & dispose of prescribed controlled substances.

It is the responsibility of the prescriber, nurse, and pharmacy to ensure patients are properly educated on safe use, storage, and disposal of opioids in order to prevent adverse drug events in patients and others.
SECURE

• Medication should always be kept in its original prescription bottle.
• A second labeled prescription bottle can be provided by the pharmacy if the medication needs to be taken to school.

The leading cause of child poisonings in the United States are related to medications.

• The death rate from unintentional drug overdose in 2014 was 21.4 per 100,000 persons, compared to 18.2 in 2013.
• In 2007, these deaths surpassed motor vehicle accidents as the #1 cause of accidental death.

SECURE

Do you have your medications secured in a locked location?

Don’t be an unintentional drug dealer.
MONITOR & SECURE

During a patient’s 1 month post-op visit for a posterior spinal fusion, the nurse is completing the patient’s medication reconciliation. The nurse asks the patient how often they are taking their hydrocodone with acetaminophen for pain. The patient states they have been out of the medication for 2 weeks even though they were prescribed a one month supply.

- This should raise a red flag to the nurse. The nurse needs to determine how often the medication was taken and if the medication was shared with others. The patient’s mother responds she only gave the patient a total of 3 tablets per day as prescribed. The mother said she kept the medication in her purse where no one else had access.

- The nurse needs to explain the importance of locking all medication in order to prevent the medication from being stolen or accidently ingested by others. A prescription lock box can be purchased online or at a store for as little as $15. Medications can also be locked in an inexpensive tool box with a combination lock to secure.

TRANSITION

Understanding how to transition off of opioids is something every patient should be educated on.

- Teach the patient and families they should use non-opioid medications such as acetaminophen and ibuprofen and alternative pain management techniques to help them weaning off of the opioid.

- Often times scheduling and alternating between acetaminophen and ibuprofen every 3-4 hours can eliminate or significantly decrease the amount of opioid pain medication needed.

TRANSITION

- If patients are taking opioids for a longer period of time and the prescribed opioids are less effective for pain management than they were initially, the patient may be developing a tolerance to the medication. It is important to tell patients and families to discuss this with the healthcare provider.

- Be sure to tell patients and families if an opioid medication was needed consistently for more than 7 days and is no longer needed for pain, the patient should follow the recommended weaning schedule provided by their healthcare provider.

Signs of withdrawal may include:
- Hot & cold flashes
- Sweating
- Goosebumps
- Agitation
- Fatigue
- Muscle aches
- Yawning
A nurse is discharging a 9 year old from the hospital following an acute appendectomy. The nurse reviews each prescription with the patient and caregiver. The patient is prescribed hydrocodone q4h prn & ibuprofen q6h prn for pain.

• Parents should be instructed to try to reduce the child’s pain by using a pillow for splinting the incisions, alter patients position, or use distraction methods.
• If pain does not improve, parent can give the child the prescribed dose of ibuprofen first.
• If the child’s pain is not improved after 1-2 hours, parent should give the child the prescribed dose of hydrocodone.
• Patients/caregivers should be instructed to try alternative pain management techniques prior to using an opioid in order to reduce the risk of abuse and addiction.
DISPOSAL

In many cases, individuals save their opioid medication and will use it for reasons the medication was not prescribed for or to give to others.

• 70% of people who abuse prescription opioids get them free from a relative or friend or by using their own prescription.

Educating patients and caregivers on proper medication disposal will help reduce prescription opioid diversion and accidental overdoses.

• Dispose
  - When the medicine is no longer needed, read the label or call the pharmacy to find out how to safely dispose of the medicine.
  - To protect your privacy and prevent identity theft, remove labels on the medicine containers before you throw it out.

• Talk to your child
  - When your child should buy your prescription medicines.
  - Tell your child if you are taking any asthma medicines, medicines to control blood pressure or medicines to control hunger.
  - If you do not know the side effect, ask a doctor or pharmacist.
  - Say what your child should do if your child needs help.
DISPOSAL

• In one recent study, 314 nurses were surveyed on opioid storage and disposal. Only 29% of those nurses knew how to correctly store and dispose of excess opioids.

• In another survey, 275 patients were given an opioid prescription following a procedure, only 58% of the prescribed medication was consumed. Researchers found patients disposed of the unused medication in various ways:
  - 89% of the individuals kept their leftover medication at home
  - 6% threw the medication in the trash
  - 2% flushed the opioids down the toilet
  - < 1% returned medication to the pharmacy

DISPOSAL

• The FDA (food & drug administration) recommends all unused or expired medications be transferred to an authorized collector for disposal, preferably a nearby drug take-back program.

• If there are no drug take-back programs available, the FDA asks that individuals contact their local law enforcement or waste management authorities for official guidelines.

• People can visit www.rxdrugdropbox.org to find a nearby collection location.

DISPOSAL

• There has been some conflicting information on proper opioid disposal. If the medication being disposed can cause serious harm if ingested by a person or pet then the medication is recommended to be flushed according to the FDA. This recommendation is a direct contradiction to the U.S. Environmental Protection Agency’s (EPA) recommendations for disposal. The EPA is concerned if medications are flushed down the toilet our drinking water may become contaminated.

• The two agencies have agreed that potentially dangerous medications, such as opioids, should be crushed and mixed with an unpalatable substance like kitty litter or coffee grounds, then sealed in a plastic container and disposed in the trash.

• If all other disposal methods are unavailable, unused opioids should be flushed down the toilet.
DISPOSAL

• When disposing medication patches (buprenorphine & fentanyl patches)
  – the adhesive side should be folded into itself (medication part should not be exposed) then flushed down the toilet.
• Patches should NEVER be disposed of in the trash due to the risk of accidental exposure.
• NCH has a Helping Hand specific to Fentanyl patches which explains how to use and dispose of the patch.
  – Every patient should be given this helping hand if prescribed a Fentanyl patch.

DISPOSAL

• A 4 year old girl was visiting her grandparents’ home and suddenly became unresponsive and died. The autopsy showed a transdermal Fentanyl patch in her stomach. Apparently, the girl ingested the patch which she found in the trash and ultimately died from a massive Fentanyl overdose (U.S. Food & Drug Administration, 2016).

DISPOSAL

During an 8 year old’s 1 month post-op appointment for a supracondylar fracture, the nurse asks the patient’s father if the child is still requiring his hydrocodone medication for pain. Father stated his son has not needed the medication for 3 weeks.
• The nurse should ask the parent if he knows how to properly dispose of the unused hydrocodone.
• The nurse needs to educate the family that the hydrocodone should not be kept if the patient no longer needs the medication for pain control.
  – Getting rid of the medication will eliminate the risk of accidental overdose or the medication being used for reasons other than its intended use.
• NCH has helping hands with instructions on how to dispose of medications that should be given to family.
Opioid Safety Helping Hand

https://www.youtube.com/watch?v=jIH0gi92KKA&t

Opioid Safety Education Button in Epic

Ambulatory setting:

Inpatient, ED, Urgent Care, and OR:

We will use this as a way to track usage of this HH and education at NCH. Our Zero Hero goal is 100% of patient and families will receive this helping hand upon discharge if they receive an opioid prescription from NCH.

Proper education of patients and families

- NCH Opioid Safety website
  http://www.nationwidechildrens.org/opioid-safety
- Helping Hand –
  - Important Facts to Know When Taking Opioids (Monitor, Secure, Transition, Dispose)
  - Opioid Helping Hands
- Educational Handouts
- Educational Videos
- Link to Medication Disposal Locations
  http://www.rxdrugdropbox.org/
  - 700 Children’s Blogs related to opioid safety and pain management
Proper education of patients and families

- Upon return visits to hospital, clinics, or during follow-up phone calls be sure to ask patients and families about opioid use, storage, and disposal of the medications at home.
  - Remember people need to hear things ~ 7 times before they start to become habit
2 Year Post Survey Results

**Prescribers**
- Are you aware of Opioid Safety Initiative at Nationwide Children’s Hospital?

**Nurses**
- Are you aware of Opioid Safety Initiative at Nationwide Children’s Hospital?
CONCLUSION

Providing patients and caregivers with verbal and written education on safe opioid management will help lower exposure to opioids, prevent abuse, and diversion.

Nurses can make a difference by being the Wingman for prescribers along with educating patients and families on opioid safety.

PCSS-O is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: Addiction Technology Transfer Center (ATTC), American Academy of Neurology (AAN), American Academy of Pain Medicine (AAPM), American Academy of Pediatrics (AAP), American College of Physicians (ACP), American Dental Association (ADA), American Medical Association (AMA), American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society for Pain Management Nursing (ASPMN), International Nurses Society on Addictions (INNSA), and Southeast Consortium for Substance Abuse Training (SECSAT).

For more information visit: www.pcss-o.org
For questions email: pcss-o@aaap.org

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