Safe Prescribing Practices

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Disclosure

- I have no financial conflicts of interest to disclose.

Objectives

- Discuss the impact of opioid abuse/misuse in society
- Identify issues faced by prescribers
- Define ways to recognize opioid abuse
- Identify high risk opioid formulations
- Develop methods to improve safety of prescribing habits

Epidemiology [1, 2, 3, 4]

- Increasing incidence of opioid use disorder and overdoses have reached epidemic proportions
- Over 3 million people aged ≥ 12 years old reported past month misuse of prescription pain medication (and this is from 2015)
- Prescription opioids are often obtained from a friend or relative rather than from a prescriber
- Available evidence suggests first opioids abused are often prescription drugs → later leading to illicit drug use

Issues Prescribers Face [5]

- Primary care physicians report concerns regarding pain medication misuse
  - Managing patients with chronic pain can be stressful
  - Concern for addiction
  - Insufficient training on prescribing opioids
- Opioid medications are effective at controlling pain, but at what cost?
  - Risk of addiction with prolonged use
  - Long term opioid therapy is often overprescribed for patients with chronic non-cancer pain
- There is a need for better clinician guidance on safe prescribing practices

Recognizing Opioid Abuse [6]

- **The 3 C's**
  - Loss of <u>C</u>ontrol
    - Reports lost/stolen medication
    - Calls for early refills
    - Seeks opioids from other sources
    - Withdrawal symptoms noted at appointments
  - <u>C</u>raving, preoccupation with use
    - Recurring requests for dose increases
    - Increasing pain despite lack of disease progression
    - Dismissive of non-opioid treatments
  - Use despite negative <u>C</u>onsequences
    - Over-sedation/somnolence
    - Decreases in activity, functioning and/or relationships

Determining Opioid Use for Chronic Pain [5, 7]

- A multimodal approach with non-pharmacologic and non-opioid therapy is preferred
  - If opioids are used, be sure to include non-pharm and non-opioid therapies as well
- Before starting opioid therapy, clear treatment goals should be established
  - Realistic goals for pain and function
- Risks and realistic benefits of opioid therapy should always be discussed with patient before and during treatment
  - Patient and clinician responsibilities for managing therapy should also be discussed regularly

Opioid Dosage and Overdose Risk [5]

- Opioid-related overdose risk is dose dependent
  - Higher opioid dosages associated with increased overdose risk

Opioid Dose (MME/day)	Odds of Overdose
< 20	Baseline Comparator
20 to < 50	1.3 – 1.9
50 to < 100	1.9 – 4.6
≥ 100	2.0 – 8.9

Morphine Milligram Equivalents [5, 7]

Opioid	Conversion Factor
Codeine	0.15
Fentanyl transdermal (in mcg/hr)	2.4
Hydrocodone	1
Hydromorphone	4
Methadone	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
≥ 61-80 mg/day	12
Morphine	1
Oxycodone	1.5
Oxymorphone	3
Tapentadol	0.4

Opioid Selection, Dosage, Duration [5, 7]

- ER/LA formulations are associated with serious risks per FDA
- Immediate-release opioids should be prescribed **instead of** extended-release/long-acting (ER/LA) opioids
- When started, the lowest effective dose should be prescribed
  - Special attention should be given to patients receiving ≥50 MME/day
  - **Avoid** increasing dose to ≥90 MME/day
- Encourage PRN dosing, avoid scheduled dosing
  - Time-scheduled opioid use – associated with substantially higher daily average opioid dosage than PRN opioid use
- Long-term opioid use often stems from acute pain treatment
  - Prescribe the lowest effective dose of immediate-release opioids for shortest period of time
  - 3 days or less is sufficient in most cases; >7 days is rarely needed

Opioid Selection, Dosage, Duration [5]

- Methadone has been shown to account for as much as 1/3 of opioid-related overdose deaths (in states participating in Drug Abuse Warning Network), despite representing <2% of opioid prescriptions outside of opioid treatment programs
  - Do not prescribe methadone for pain unless you are comfortable and well versed with the medications unique side effect profile and pharmacokinetic parameters

Co-prescribing [5, 7]

- **Avoid prescribing benzodiazepines and opioids concomitantly**
- Studies show that concurrent use of benzodiazepines and opioids put patients at greater risk of fatal overdose

- 3 separate studies found evidence of concurrent use in 31-61% of fatal cases
  - Those who's deaths were related to opioids were more likely to have prescriptions from multiple physicians and pharmacies

Assessing Risk / Addressing Harms of Use [5, 7]

- Before starting and during therapy continuation, evaluate risk factors for opioid-related harms
- Consider offering naloxone
  - History of overdose
  - History of substance abuse
  - High opioid dosages (≥50 MME/day)
  - Concurrent benzodiazepine use
- Review PDMP (Prescription Drug Monitoring Program) data
  - Recommended to query with every prescription

Assessing Risk / Addressing Harms of Use [5, 7]

- Obtain urine drug test prior to starting opioid therapy for chronic pain
  - Consider repeating urine drug screen at least annually
  - Assess for prescribed medications as well as other controlled and illicit drugs

- Offer or arrange evidence-based treatment (medication-assisted treatment w/ buprenorphine or methadone) for patients with an opioid use disorder

Conclusion

- Opioid pain medications are extremely effective for managing pain, but need to be prescribed responsibly
- Avoid prescribing benzodiazepines and opioids concomitantly
- Avoid prescribing ER/LA opioid formulations, immediate release preferred
- PRN dosing schedules are preferred over around-the-clock dosing
- Utilize the PDMP to avoid overprescribing
- Identify clear and realistic pain management goals with patients

References

1. Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid-Involved Overdose Deaths – United States, 2010-2015. MMWR Morb Mortal Wkly Rep 2016; 65:1445.
2. Substance Abuse and Mental Health Administration. 2015 National Survey on Drug Use and Health: Detailed Tables. Department of Health and Human Services, Rockville, MD 2016.
3. Jones CM, Paulozzi LJ, Mack KA. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use United States, 2008-2011. JAMA Intern Med 2014; 174:802.
4. Cicero TJ, Ellis MS, Kasper ZA. Increased use of heroin as an initiating opioid of abuse. Addict Behav 2017; 74:63.
5. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49.
6. Savage SR et al. NIDA. Addiction Science in Clinical Practice. Vol. 4, June 2008 Manchikanti L et. al. Pain Physician 2008; Opioids Special Issue I I:SI55-SI80.
7. Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022. MMWR Recomm Rep 2022;71(No. RR-3):1–95.