



OPIOID ADDICTION AND PAIN MANAGEMENT IN DENTISTRY

Dr. Rochisha Singh Marwaha
Clinical Assistant Professor
Department of Comprehensive Dentistry



Learning Objectives

Upon completion of this session, participants should be able to:

- identify signs of opioid use and abuse in patients
- educate patients about the risks associated with leftover opioid doses
- implement evidence-based practices for acute pain management following dental procedures

INTRODUCTION

“The nation’s COVID pandemic made the nation’s drug overdose epidemic worse” - AMA

From 2019-2020,

- the number of drug overdose deaths increased by nearly 30%
- 75% of 91,799 drug overdose deaths involved an opioid

The Spike in Drug Overdose Deaths During the COVID-19 Pandemic and Policy Options to Move Forward



THE OPIOID EPIDEMIC BY THE NUMBERS



70,630

people died from drug overdose in 2019²



10.1 million

people misused prescription opioids in the past year¹



1.6 million

people had an opioid use disorder in the past year¹



2 million

people used methamphetamine in the past year¹



745,000

people used heroin in the past year¹



50,000

people used heroin for the first time¹



1.6 million

people misused prescription pain relievers for the first time¹



14,480

deaths attributed to overdosing on heroin (in 12-month period ending June 2020)³



48,006

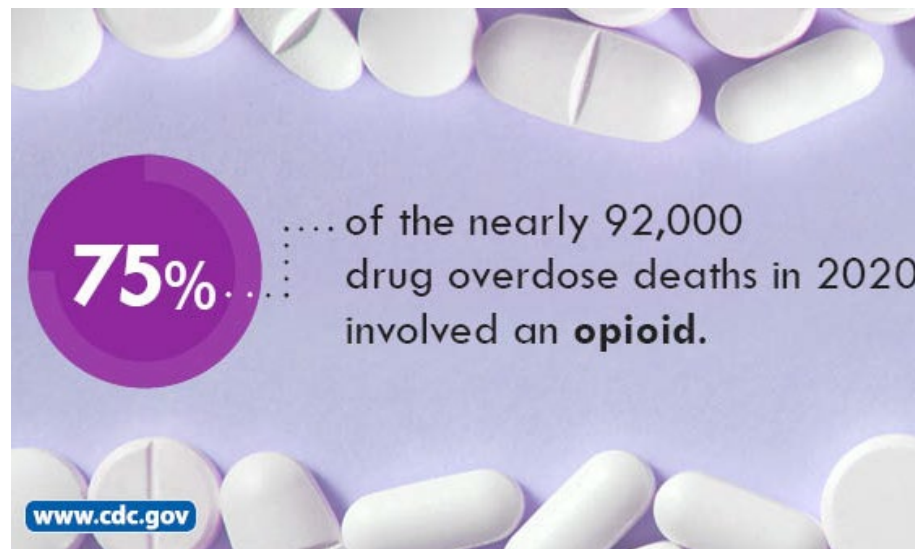
deaths attributed to overdosing on synthetic opioids other than methadone (in 12-month period ending June 2020)³



187
PEOPLE

die every day from an opioid overdose (including Rx and illicit opioids).

www.cdc.gov





What are Opioids?

- Class of drugs naturally found in the opium poppy plant
- Contains chemicals that produce effects like pain relief, relax the body and induce euphoria
- The most commonly used opioids:
 - Morphine
 - Prescription opioids
 - Fentanyl
 - Heroin
- Highly addictive substances

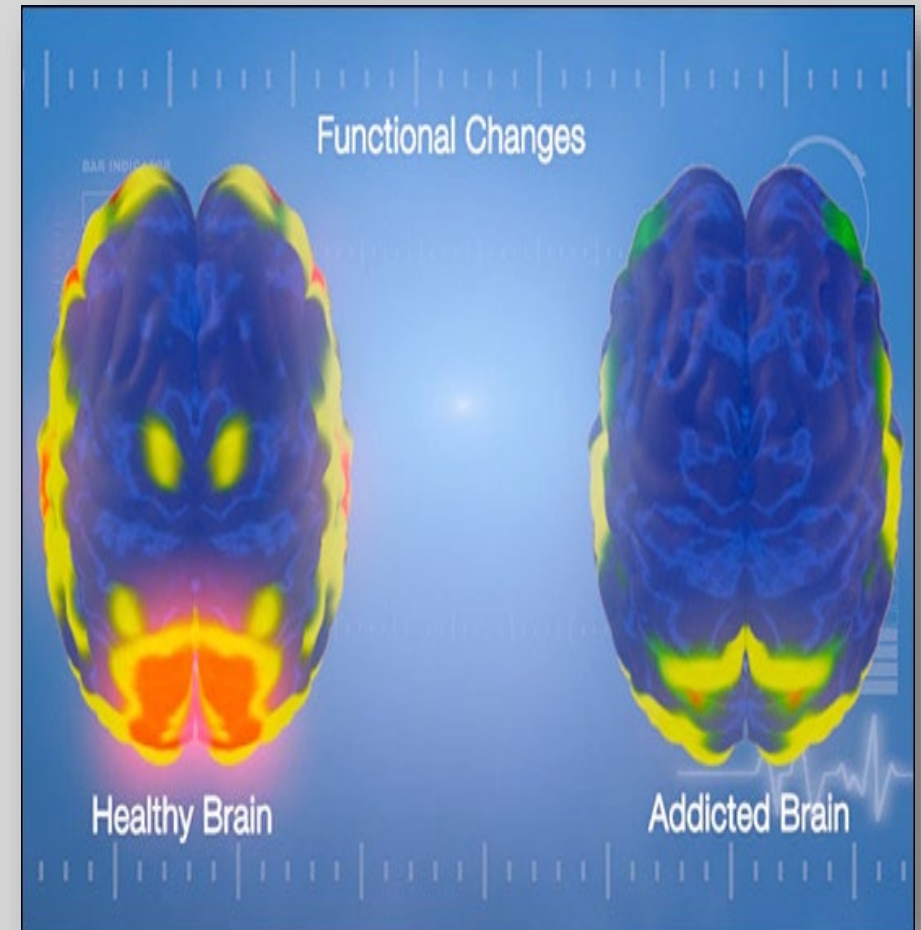
Opioid Effects

Short –Term Effects

- Relieve pain
- Drowsiness
- Euphoria
- Constipation
- Slow breathing
- Nausea

Long - Term Effects

- Psychological and neurological effects
- Permanent brain damage
- Addiction
- Overdose
- Coma
- Death

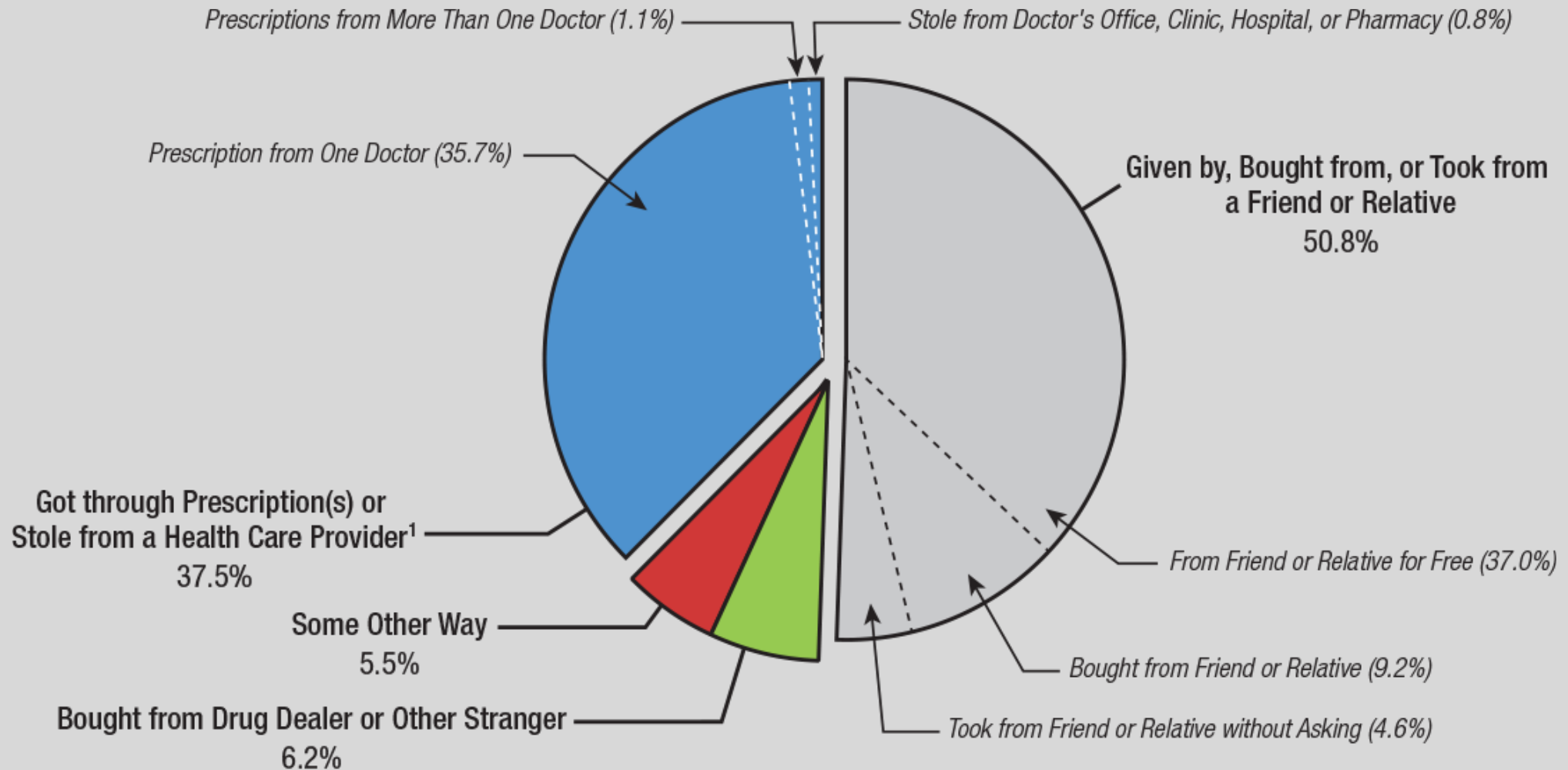




Prescription Opioids

- Prescription opioids are used mostly to treat moderate to severe pain
- Common prescription opioids:
 - Hydrocodone (Vicodin)
 - Oxycodone (Percocet, Oxycotin)
 - Morphine (Kadian, Avinza)
 - Codeine
- Safe to use for pain relief when taken at low dose, for a short duration and as prescribed by a doctor

Prescription Opioid Misuse



Source: Where Pain Relievers Were Obtained for Most Recent Misuse among People Aged 12 or Older Who Misused Pain Relievers in the Past Year: 2019



Consequences of Opioid Misuse

- Opioid Use Disorder/Addiction
- Switch to other synthetic opioids like Heroin
- Increased high-risk behaviors
- Drug-related crime
- Drug Overdose
- Death

Prescription Opioid Use in Dentistry

- Dentists (15.8%) are second highest prescribers of opioids after internal medicine (16.4%)
- Opioid prescriptions filled by dentists – 8.6%
- Dentists are the leading source of opioid prescriptions in children and adolescents (10-19 yrs.)
- 75% of patients are first time users, 31% are adolescents and young adults
- 59.1% prescriptions are filled following oral surgery procedures
- A 2016 RCT revealed, 54% opioids prescribed for dental surgery procedures were unused

Treating dental pain with opioids linked to higher risk of overdose in patients, family members

Study shows certain patients have even greater risk of overdose if they fill opioid prescriptions; strengthens argument against use of opioids for most dental pain



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Contact: [Kara Gavin](mailto:kegavin@umich.edu),
kegavin@umich.edu,
[Laura Bailey](mailto:Laura.Bailey@umich.edu),
baileylm@umich.edu

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What does recent data suggest?



Filling opioid prescriptions for dental procedures increases the risk of opioid overdose for both patient's and their family members



Nearly 27% of teens and adults filled an opioid prescription



Approximately, 2,700 opioid overdoses occurred within 90 days of dental procedures

Efficacy of Prescription Opioids for Dental Procedures

OPIOID RESEARCH FINDINGS

50%



APPROXIMATELY 50 PERCENT OF PRESCRIBED OPIOIDS WERE LEFT UNUSED.



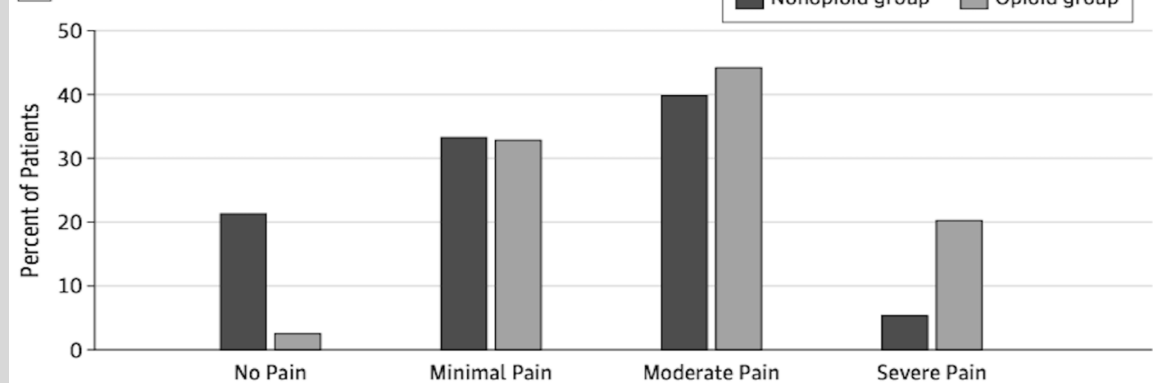
PATIENT SATISFACTION WITH PAIN MANAGEMENT WAS NO DIFFERENT BETWEEN OPIOID AND NON-OPIOID USERS.



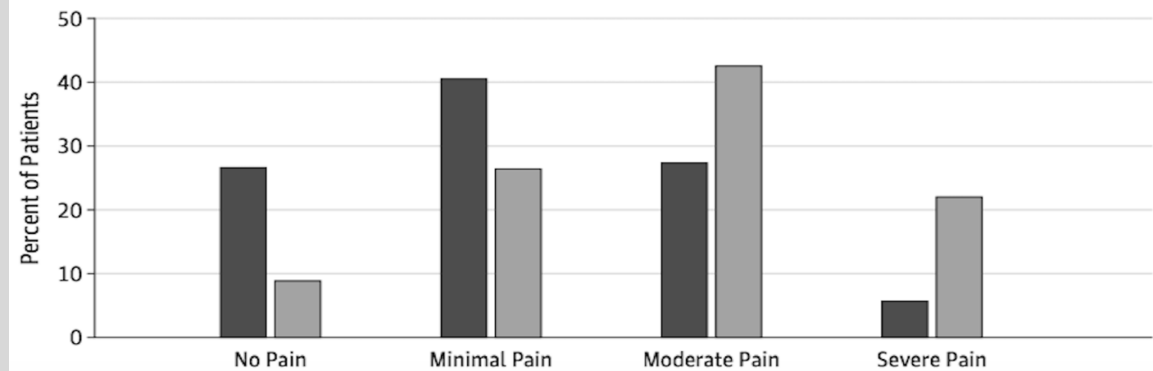
OPIOID-USING PATIENTS REPORTED HIGHER PAIN AFTER PROCEDURES.

Pain Level of Opioid Users After Dental Procedure

A Patients who underwent surgical extraction (n = 155)



B Patients who underwent routine extraction (n = 174)





Dentists Role in Combatting the Opioid Crisis

- Identify signs of opioid use and abuse in patients
- Educate your patients about the long-term effects of opioid use and risk of drug diversion
- Manage patient expectations
- Implement evidence-based guidelines for management of acute pain following dental procedures
- Follow best-practices when prescribing opioids

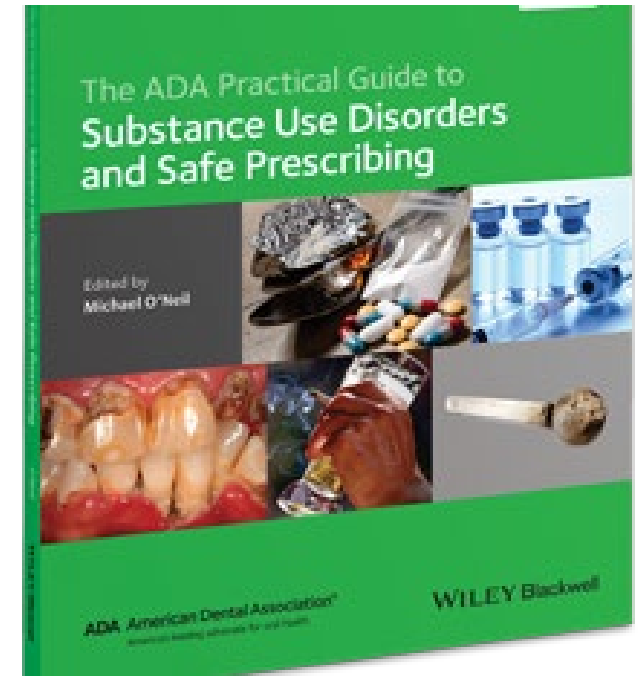
Dentists Role in Combatting the Opioid Epidemic

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Identify Signs of Opioid Misuse

- Ask patient's medical, dental and social history, social history may indicate substance use behaviors
- Screen for opioid use disorder before initiating opioid therapy by checking your state's prescription drug monitoring program (PDMP)
- Identify “red flags” in addictive patients
 - Doctor shopping
 - History of switching providers
 - Requesting a specific medication



What can you do as a dental provider?

- Take training courses on addiction to identify signs
- Address unhealthy substance use in an open and nonjudgmental manner
- Provide resources and referrals for addiction treatment
- Offer prevention messages

Educate your Patient!

Manage	Patient demands/expectations
Explain	Efficacy of Non-Steroidal Anti-inflammatory Drugs (NSAIDs) over opioids
Discuss	Short and long-term effects of opioids if prescribing is necessary
Address	Safe storage and disposal of opioid medication when prescribed
Educate	Risks of “left-over” opioid medication



CDC Clinical Practice Guideline for Prescribing Opioids for Acute Pain

Addresses the following areas:

- Determine whether to initiate opioids for pain
- Selecting opioids and determining opioid doses
- Deciding the duration for initial opioid prescription and conducting follow-up
- Assessing risk and addressing potential for opioid use



BOX 3. Recommendations for prescribing opioids for outpatients with pain, excluding pain management related to sickle cell disease, cancer-related pain treatment, palliative care, and end-of-life care; recommendation categories; and evidence types — CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022

Determining Whether or Not to Initiate Opioids for Pain (Recommendations 1 and 2)

1. Nonopioid therapies are at least as effective as opioids for many common types of acute pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider opioid therapy for acute pain if benefits are anticipated to outweigh risks to the patient. Before prescribing opioid therapy for acute pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy (recommendation category: B; evidence type: 3).
2. Nonopioid therapies are preferred for subacute and chronic pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider initiating opioid therapy if expected benefits for pain and function are anticipated to outweigh risks to the patient. Before starting opioid therapy for subacute or chronic pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy, should work with patients to establish treatment goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks (recommendation category: A; evidence type: 2).

Selecting Opioids and Determining Opioid Dosages (Recommendations 3, 4, and 5)

3. When starting opioid therapy for acute, subacute, or chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release and long-acting (ER/LA) opioids (recommendation category: A; evidence type: 4).
4. When opioids are initiated for opioid-naïve patients with acute, subacute, or chronic pain, clinicians should prescribe the lowest effective dosage. If opioids are continued for subacute or chronic pain, clinicians should use caution when prescribing opioids at any dosage, should carefully evaluate individual benefits and risks when considering increasing dosage, and should avoid increasing dosage above levels likely to yield diminishing returns in benefits relative to risks to patients (recommendation category: A; evidence type: 3).
5. For patients already receiving opioid therapy, clinicians should carefully weigh benefits and risks and exercise care when changing opioid dosage. If benefits outweigh risks of continued opioid therapy, clinicians should work closely with patients to optimize nonopioid therapies while continuing opioid therapy. If benefits do not outweigh risks of continued opioid therapy, clinicians should optimize other therapies and work closely with patients to gradually taper to lower dosages or, if warranted based on the individual circumstances of the patient, appropriately taper and discontinue opioids. Unless there are indications of a life-threatening issue such as warning signs of impending overdose (e.g., confusion, sedation, or slurred speech), opioid therapy should not be discontinued abruptly, and clinicians should not rapidly reduce opioid dosages from higher dosages (recommendation category: B; evidence type: 4).

Deciding Duration of Initial Opioid Prescription and Conducting Follow-Up (Recommendations 6 and 7)

6. When opioids are needed for acute pain, clinicians should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids (recommendation category: A; evidence type: 4).
7. Clinicians should evaluate benefits and risks with patients within 1–4 weeks of starting opioid therapy for subacute or chronic pain or of dosage escalation. Clinicians should regularly reevaluate benefits and risks of continued opioid therapy with patients (recommendation category: A; evidence type: 4).

Assessing Risk and Addressing Potential Harms of Opioid Use (Recommendations 8, 9, 10, 11, and 12)

8. Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk for opioid-related harms and discuss risk with patients. Clinicians should work with patients to incorporate into the management plan strategies to mitigate risk, including offering naloxone (recommendation category: A; evidence type: 4).
9. When prescribing initial opioid therapy for acute, subacute, or chronic pain, and periodically during opioid therapy for chronic pain, clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or combinations that put the patient at high risk for overdose (recommendation category: B; evidence type: 4).
10. When prescribing opioids for subacute or chronic pain, clinicians should consider the benefits and risks of toxicology testing to assess for prescribed medications as well as other prescribed and nonprescribed controlled substances (recommendation category: B; evidence type: 4).
11. Clinicians should use particular caution when prescribing opioid pain medication and benzodiazepines concurrently and consider whether benefits outweigh risks of concurrent prescribing of opioids and other central nervous system depressants (recommendation category: B; evidence type: 3).
12. Clinicians should offer or arrange treatment with evidence-based medications to treat patients with opioid use disorder. Detoxification on its own, without medications for opioid use disorder, is not recommended for opioid use disorder because of increased risks for resuming drug use, overdose, and overdose death (recommendation category: A; evidence type: 1).

ADA Statement on Use of Opioids for Treatment of Dental Pain - 2016

1. When considering prescribing opioids, dentists should conduct a medical and dental history to determine current medications, potential drug interactions and history of substance abuse.
2. Dentists should follow and continually review Centers for Disease Control and state licensing board recommendations for safe opioid prescribing.
3. Dentists should register with and utilize prescription drug monitoring programs (PDMP) to promote the appropriate use of controlled substances for legitimate medical purposes, while deterring the misuse, abuse and diversion of these substances.
4. Dentists should have a discussion with patients regarding their responsibilities for preventing misuse, abuse, storage and disposal of prescription opioids.
5. Dentists should consider treatment options that utilize best practices to prevent exacerbation of or relapse of opioid misuse.
6. Dentists should consider nonsteroidal anti-inflammatory analgesics as the first-line therapy for acute pain management.
7. Dentists should recognize multimodal pain strategies for management for acute postoperative pain as a means for sparing the need for opioid analgesics.
8. Dentists should consider coordination with other treating doctors, including pain specialists when prescribing opioids for management of chronic orofacial pain.
9. Dentists who are practicing in good faith and who use professional judgment regarding the prescription of opioids for the treatment of pain should not be held responsible for the willful and deceptive behavior of patients who successfully obtain opioids for non-dental purposes.
10. Dental students, residents and practicing dentists are encouraged to seek continuing education in addictive disease and pain management as related to opioid prescribing.

ADA Evidence-based Practices for Analgesic Use Based on Pain Levels

Mild pain

- Ibuprofen 200-400 mg as needed for pain every 4-6 hrs.

Mild to Moderate pain


- Ibuprofen 400-600 mg every 6 hours for 24 hrs., then
- Ibuprofen 400 mg as needed for pain every 4-6 hrs.

Moderate to Severe pain

- Ibuprofen 400-600 mg + acetaminophen 500 mg every 6 hours for 24 hrs., then
- Ibuprofen 400 mg + acetaminophen 500 mg as needed for pain every 6 hours

Severe pain

- Ibuprofen 400-600 mg + acetaminophen 650 mg with hydrocodone 10 mg fixed interval every 6 hours for 24-48 hrs., then
- Ibuprofen 400-600 mg + acetaminophen 500 mg as needed for pain every 6 hrs.



CASE PRESENTATION
DR. YASHASHRI URANKAR
CHIEF DENTAL OFFICER
COMMUNITY HEALTH CENTERS OF SOUTH-CENTRAL
TEXAS

Patient Background

- 32yr. old female patient reports to the dental clinic
- Chief Complaint: “I have extreme pain 10/10 in the lower right tooth for 3 days and I can not eat, sleep or perform daily activities due to pain.”
- Vitals: BP -78/59 mm of Hg
Pulse - 64
- Medical history: No significant medical history reported
- Dental history: RCT #29, 30 with crowns, several missing teeth, previous treatments under sedation, extreme dental anxiety
- Drug allergy: Ibuprofen, Tylenol, Aspirin

Examination and Diagnosis



Clinical examination: Discolored #28 with deep caries on the buccal side, Tender to percussion and palpation –ve, no response to vitality tests, no periapical radiolucency. No signs of swelling, fever and enlarged lymph nodes.



Radiographic examination: Periapical radiograph #28



Diagnosis: necrotic pulp #28



Treatment options offered: RCT/Crown/Extraction/replacement with implant or a bridge as #29 and 30 already root canal treatment and crowns



Patient requests saving the tooth, procedures needs to be completed under full sedation



Periapical Radiograph #28

Proposed Treatment Plan

- Tx: Immediate pulpectomy to relieve pain #28 and schedule for completion of RCT.
- Rx: Lodine (NSAID) – Lodine works by reducing hormones that cause inflammation and pain in the body. It is used to treat mild to moderate pain.
- Patient asked for a referral instead.
- Patient behavior: stubborn about getting medication for pain and sedation for dental treatment. On offering to start the treatment same day under nitrous, patient said that she does not have money and nitrous does not work for her.
- 4/13/23 - One month later, patient calls the dental clinic at a different site, request pain medication (Tylenol #3).
- She was offered an immediate appointment for pulpectomy.
- When reached out to make an appointment, she said that the tooth was taken care of

Summary

Summary	Narcotics * (excluding buprenorphine)	Sedatives	Buprenorphine
Total Prescriptions: 4	Current Qty: 0	Current Qty: 0	Current Qty: 0
Total Prescribers: 4	Current MME/day: 0.00	Current mg/day: 0.00	Current mg/day: 0.00
Total Pharmacies: 1	30 Day Avg MME/day: 2.25	30 Day Avg mg/day: 0.00	30 Day Avg mg/day: 0.00

Prescriptions

Fill Date	ID	Written	Drug	Qty	Days	Prescriber	Rx #	Pharmacy	Refill	Daily Dose*	Pymt Type	PMP
04/13/23	1	04/13/23	Acetaminophen-Cod #3 Tablet	15.00	4	Ra Ray	15302	Heb (6366)	0	16.88 MME	Comm Ins	TX
03/21/23	1	03/21/23	Acetaminophen-Cod #3 Tablet	12.00	2	He Mar	10970	Heb (6366)	0	27.00 MME	Comm Ins	TX
02/15/23	1	02/15/23	Hydrocodone-Acetamin 5-325 Mg	12.00	3	Jo Tor	4313	Heb (6366)	0	20.00 MME	Comm Ins	TX
02/10/23	1	02/10/23	Hydrocodone-Acetamin 7.5-325	15.00	4	Se Hop	3683	Heb (6366)	0	28.13 MME	Medicaid	TX

PDMP Aware Profile

- Texas PDMP reports checked
- The patient had obtained Tylenol#3 (15 tablets) prescription from another provider
- PDMP Summary revealed, patient had previously been prescribed 27 tablets of Vicodin in 2/10/20 and 2/15/23 and 12 tablets of Tylenol #3 on 03/21/2023

Questions



How to educate a stubborn patient ?



Can you refuse to give a prescription?



What alternative medications do you suggest ?



Resources

- **Recommendations for Management of Acute Dental Pain in General and Special Populations**
<https://www.ihs.gov/doh/documents/Recommendations%20for%20Acute%20Dental%20Pain%20Management.pdf>
- **Oral Analgesics for Acute Dental Pain** (includes ADA Statement on Use of Opioids in Treatment of Dental pain, Acute Dental Pain Management Guidelines, ADA policy on opioid prescribing) <https://www.ada.org/en/resources/research/science-and-research-institute/oral-health-topics/oral-analgesics-for-acute-dental-pain>
- **Opioid education for dentists**
<https://www.ada.org/resources/practice/wellness/opioid-education-for-dentists>
- **Chairside Pain Management Discussion**
https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/practice/health-and-wellness/ada_chairside_pain_management_discussion.pdf?rev=b72ea26d3a434bd590a0e321f07e9904&hash=B496A3F1062EFCAE52707FB8E662694A
- **Chairside Pain Management Checklist**
https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/practice/health-and-wellness/ada_chairside_pain_management_checklist.pdf?rev=72fb3c4eadaa4966842949588ebae27d&hash=91657317E1F12CF682172327E5DCDB51
- **CDC Clinical Practice Guideline for Prescribing Opioids in the United States, 2022**
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. DOI: <http://dx.doi.org/10.15585/mmwr.rr7103a1>



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Thank you!

Contact information:

Dr. Rochisha Singh Marwaha

marwaha@uthscsa.edu