The physician’s role in the opioid crisis

NCOA-SCOS 2018 Joint Conference

2/23/18

DON TEATER MD, MPH
BLAKE FAGAN MD
Don Teater MD, MPH
Teater Health Solutions
Meridian Behavioral Health Services
Waynesville, NC

Blake Fagan MD
Chief Education Officer, MAHEC
• I have no disclosures
• Everything I present is evidence-based
• If I give an opinion, I will note that it is my opinion based on the evidence I have reviewed
250,000

Number of deaths in the last 20 years from opioids.

More than 4 times the number of American deaths in the Vietnam war\(^1\)

This is an epidemic. And we are the vector!

This epidemic is completely reversible with a change of prescriber behavior that will result in better pain management
Opioid Prescribing Rates by County in NC²
Opioid Prescribing Rates by County in NC²
Confession
Goals

1) Describe the impact of the opioid crisis
2) Identify the CDC guidelines for prescribing opioids for acute pain
3) Describe the NC STOP act
4) Identify the CDC guidelines for prescribing opioids for chronic pain
5) Describe opioids’ impact on our patients
Opioid facts

The United States has 4.6% of the world’s population.
- We use 80% of the world’s opioids!³
- 83% of the world’s population has no access to any opioids.⁴
USA total opioid consumption (morphine equivalence milligrams)
1986-2015

Sources: International Narcotics Control Board; World Health Organization population data
By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2017
“Opioid medications in the class of morphine are designated to have a legitimate medical use and are indicated for the medical management of pain, especially if the pain is severe. Although there use for the relief of a variety of chronic non-cancer pain conditions continues to evolve, and evidence of effectiveness for these conditions is derived largely from clinical experience, there seems to be a general agreement that some patients with such pain can be properly treated with opioid therapy” (p. 1).
The State of US Health

Years lived with disability (in thousands)

- Low back pain
- Other MS disease
- Neck pain
- Osteoarthritis

1990 vs 2010
Rates of opioid overdose deaths, sales and treatment admissions, US, 1999-2010.⁸
Substances* Contributing to Unintentional Medication and Drug Overdose Deaths, North Carolina Residents, 1999-2016

*These counts are not mutually exclusive. If the death involved multiple drugs it can be counted on multiple lines.

Switching Gears
Opioid receptors

Enable us to achieve a goal (short term).\textsuperscript{13,14}

- Decrease pain.
- Increase motivation.
- Increase confidence.
- Increase reward.
- Reduce depression and anxiety.
- Increase pleasure in current activity.
- Increase “warmth-liking”.\textsuperscript{15}
  - Liking warm things.
  - Love.
  - Interpersonal bonding.
Chronic opioid consumption:

- Dopamine production decreased
- Normal reward decreased
- Opioid receptors decreased
- Endorphin decreased
- Motivation decreased
- Depression increased
Safe Opioid Prescribing
CDC Guideline for Acute Pain

IF you prescribe (opioids)...

Prescribe < 3 day supply

More than 7 days will rarely be required

Counsel patients about safe storage and disposal of unused opioids
What should you do with unused opioids?

1. **LOCK** them up

2. **Take them to a permanent disposal DROP box**
   - [rxdrugdropbox.org](http://rxdrugdropbox.org) to find locations

3. **Add COFFEE GROUNDS** and water to a pill bottle and then throw it away

4. **If you are unable to do any of these things, FLUSH them**
NC STOP Act

Went into effect January 1st, 2018

If you prescribe opioids for acute pain, initial prescription must be 5 days or less

For post-op pain 7 days or less

Must look patient up in the NC CSRS and document in your chart that you did look them up (Delayed)
NC STOP Act

After 5 (or 7) days, more opioids can be prescribed, but provider must have a consultation
- This can be over the phone or an office visit

Situations that do not require following the law
- In the hospital
- Nursing home
- Residential Care Facility
- Hospice
- Patient with cancer
NC STOP Act

For Chronic opioid pain prescribing

- Must look the patient up in the NCCSRS
  - initially
  - and every 90 days at a minimum
Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015
FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days’ supply* of the first opioid prescription — United States, 2006–2015.
FIGURE 2. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of prescriptions* in the first episode of opioid use — United States, 2006–2015**
What about Tramadol?

Not part of the STOP act (tramadol is schedule IV)

If initial treatment was with tramadol

- 13.7% at 1 year
- 6.8% at 3 years\textsuperscript{16}
CDC Guideline for Chronic Pain

In general, **DO NOT** prescribe opioids as the first-line treatment for chronic pain

1) Assess pain and function
2) Consider if non-opioid therapies are appropriate
3) Talk to patients about treatment plan
4) Evaluate risk of harm or misuse
If going to prescribe opioids for chronic pain
Start with immediate-release
Avoid >= 90 MME/day
If prescribing >= 50 MME/day, increase follow up frequency.
  ◦ Prescribe naloxone
Assess, Tailor & Taper
Talking with patients about naloxone

Encourage patients to fill their naloxone

Good Samaritan law

No prescription needed
- Most pharmacies have over the counter naloxone (69% in NC)
- If uninsured, contact the North Carolina Harm Reduction Coalition
  - http://www.nchrc.org/
Naloxone/Narcan

- >50mg MME/day
- History of overdose
- Concomitant benzodiazepine
- History of substance use disorder
Efficacy of Opioids for Chronic Pain

Annals of Internal Medicine


- 4 studies indicated that opioids did not show reduced chronic back pain when compared with placebo or non-opioid control
- Prevalence of life time substance use disorders ranged from 36% to 56%
- Prevalence of current substance use disorders were estimated to be as high as 43%
Opioid Alternatives
Acute pain: treatment

Acetaminophen
NSAIDS
Opioids
Topical agents
Nonpharmacologic (PT, ice, heat, etc.)
Side Effects

Acetaminophen
  ◦ Liver

NSAIDs
  ◦ GI
  ◦ Renal
  ◦ Cardiac
Opioids

Side Effects:
- Mentally impairing.\textsuperscript{20,21}
- Delay recovery.\textsuperscript{22,23}
- Increase medical costs.\textsuperscript{24}
- Opioid hyperalgesia.\textsuperscript{25,26}
- Double the chance of disability (if prescribed for 7 days or more).\textsuperscript{27}
- Increase falls.\textsuperscript{28}
- Cardiac, GI?\textsuperscript{29,30}
- Treat depression.\textsuperscript{31}
- Brain changes.\textsuperscript{32}
- Addiction.\textsuperscript{33,34}
Efficacy of pain medications

Acute pain\textsuperscript{35,36}

Percent with 50% pain relief

<table>
<thead>
<tr>
<th>Medication</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen 200 mg</td>
<td>37</td>
</tr>
<tr>
<td>Acetaminophen 500 mg</td>
<td>28</td>
</tr>
<tr>
<td>Ibuprofen 400 mg</td>
<td>40</td>
</tr>
<tr>
<td>Oxycodone 15 mg</td>
<td>21</td>
</tr>
<tr>
<td>Oxy 10 + acet 1000</td>
<td>37</td>
</tr>
<tr>
<td>Ibu 200 + acet 500</td>
<td>62</td>
</tr>
</tbody>
</table>
But You Are Oncologists
Oral Opioid vs. Nonopioid Analgesics in ED

Chang et al. (2017)
• Randomized control trial in the emergency department for patients with acute strains, sprains, and fractures
• Tylenol 1000 mg and ibuprofen 400 mg were found to be equivalent to opioids at treating acute pain\textsuperscript{37}
POST-OP PAIN

- Enhanced recovery after surgery (ERAS)

- 109 patients having colorectal surgery c/w 98 controls.\(^{39}\)

- Protocol includes:
  - Pre-op counseling
  - Carbohydrate loading
  - Multimodal analgesia with avoidance of intravenous opioids
  - Intraoperative goal-directed fluid resuscitation
  - Immediate postoperative feeding
  - Immediate ambulation
ERAS outcomes\textsuperscript{39}

ERAS patients compared to controls:

• Ambulated on POD 0: 77% (0%)
• Total morphine equivalents: 63 (280)
• Any complication: 15% (30%)
• Length of stay in days: 4.6 (6.8)
• Hospital costs: $13,306 ($20,435)
• Press-Ganey patient satisfaction: 98% (43%)
Other Post-op Pain studies

• UNC – CH hand surgeon\textsuperscript{40}
• Dartmouth Study\textsuperscript{41}
• Opioids increase the risk of post-op wound infections\textsuperscript{42}
• Increase falls
  • Geriatrics\textsuperscript{43}
  • Pediatrics\textsuperscript{44}
• The longer one is on opioids the greater the risk of being on permanent disability\textsuperscript{46}
When are opioids useful?

• End of life care. – Not necessarily cancer dx.
• Acute (severe) trauma – for a short period.
Summary: So I hope you can

1) Describe the impact of the opioid crisis
2) Identify the CDC guidelines for prescribing opioids for acute pain
3) Describe the NC STOP act
4) Identify the CDC guidelines for prescribing opioids for chronic pain
5) Describe opioids’ impact on our patients
Secondary Goal

1) You know 1 acetaminophen (500mg) and 1 Ibuprofen (200mg) is more effective pain control than 15mg of oxycodone for acute pain
References:


References:


18. SAMHSA: Talking to your kids about prescription drug abuse. SMA-12-4676B1


References:


References:


