Family medicine and opiate epidemic as a new physician 2016

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Conflicts

- None

- Trying to share my “new physician wealth of knowledge”.
Why I enjoy family medicine

Rewarding, frustrating, procedures, babies, children, adults, women’s health, sex education, and DAILY LIFE issues, mental health
Goals of the talk

- Big picture of current epidemic in family medicine
- Definitions (scheduled medications, opiates, benzodiazepines, tolerance/dependence, epidemic, epidemiology)
- Why the opiate epidemic/crisis, and why are we so worried?
- Being a new family practice physician 2016
- Typical day in FM
- 3 patient cases
- Understand current challenges
- Potential Solutions?
- Recommendations
- Data, facts CDC

“Guidelines should not be considered for substitutes for individualized patient care and treatment decisions”
Why interested in this topic?

1) 1) residency was a great, and fun experience from many aspects, and some patients made me curious of what they “consider important in their health and management”.

2) 2) Daily challenges in family medicine, CS medications

3) 3) We need more education, support, experience and more education for family practice physicians
Residency clinical research

- Medication Safety: Behaviors and Perceptions among Outpatient Adults
Challenging patient statements in clinic

► Patient #1
► “hi Doc, I’m here to get my prescription for percocet, dilaudid, valium…..”

► Patient #2
► “I’ve been buying my meds off the streets for years, can I have a prescription? I’m also here to establish care”.

► Patient #3
► “my girlfriend gave me a couple of her percocet and flexeril for my migraine, can I have a prescription, it would help a lot. “
Interesting topic in residency led to clinical research

- **Interest:**
  - To collect information on the behaviors and attitudes of safe handling and storage of prescription medications of an outpatient population. (community health center)

- **Study:**
  - Single center (Thundermist Health Center, WW), IRB approved observational study
  - N=100 patients (November 2013-January 2014) 69% were female and 37% had children, mean age was 47
  - Patients were 18 years and older
  - Voluntary participation
  - 2 page survey
  - Patients were ineligible with any active illness, belonging to any institutional based communities
  - Demographic data included age, gender, parental status, controlled substance use, then med storage status, sharing status
  - Descriptive statistics were used to analyze individual survey items and evaluate correlations between the variables
Family medicine residency and clinical research survey questions
Results from our study

• 41% were currently prescribed a controlled medication.
• 64% reported never keeping medications in a locked place.
• 21% reported saving unused medications
• 57% reported flushing down the toilet or throwing in trash

Patients using controlled substances were more likely to report others sharing a medication with them \((p=0.044)\), and saving unused medications (vs. disposing of them, \(p=0.05\)), when compared to patients who were not taking controlled substances

Cross tabulation of remaining study variables did not show significant differences in responses to survey items based on gender, use of controlled substances, or parental status \((p>0.05)\).
Patient answers

How Often Have You Shared Your Prescription Medications?

- Never 77%
- Rarely (6%) or Sometimes (4%)
- No Answer 13%

Reason for Sharing:

- Wanted To Help 30%
- Ran Out of Med 30%
- No Time 10%
- Couldn’t Afford 10%
- No Answer 20%
Translating into clinical medicine

Our role in the primary care outpatient world:

- Recognize patients who are at risk
- Discuss risks and benefits
- Patient education about combination of medications
- Women and pregnancy and prescription medications
- Increase awareness
- PDMPs (use prescription drug monitoring programs)
- Patient education, clinicians education, patient education
Primary care

- **Our role in the primary care outpatient world**, after 2 years in Primary care:
  - Recognize patients who are at risk, ask questions
  - Discuss risks and benefits at every visit
  - Patient education about combination of medications
  - Women and pregnancy and prescription medications
  - Increase awareness, at every visit
  - PDMPs (use prescription drug monitoring programs)
  - Patient education, clinicians education, patient education
What is the big deal with CS medications?
graphs
Drug overdose death rates 2014

Drug overdose death rates, United States, 2014*

Drug overdose deaths per 100,000 population

- 6.3 - 11.7
- 11.9 - 14.4
- 15.1 - 18.4
- 19 - 35.5

*Age-adjusted death rate per 100,000 population
Source: CDC National Vital Statistics System
“rate of past year opioid abuse or dependence and rate of medication assisted treatment capacity with methadone or buprenorphine
Typical day in primary care

- 1) 2 year old male rash x 2 months
- 2) 24 year old female discuss SSRI
- 3) 44 year old female-refill lorazepam (missed 2 appointments)
- 4) 52 year old female ? shingles
- 5) 32 year old male insomnia, stomach ache, muscles aches x 6 months
- 6) new patient, 41 year old, chronic pain medication , needs refills
- 7) 22 year old male, on ADD medication, needs refill, missed last appointment
- 8) 66 year old female with abscess on breast, anxiety, depression and SI x 2 days
- 9) 5 year old well child
- 10) 95 year old female follow up, with dementia
Typical day in primary care

- 11) newborn, one week old with jaundice, breastfeeding issues
- 12) 44 year old female, post op cholecystectomy
- 13) 77 year old male TCM post CABG
- 14) 30 year old female with sore throat, question mono
- 15) 35 year old male ADD med check
- 16) 44 year old female with anxiety, med check, new symptoms, insomnia
- 17) 32 year old female, with rectal abscess, depression/anxiety, needs immunizations, medication refill
What is pain?

- Physical suffering or discomfort caused by illness or injury

- What is acute pain?
  - Days to couple weeks

- What is chronic pain?
  - > 3 months
What is an epidemic?

- “a widespread occurrence of an infectious disease in a community at a particular time.”
Scheduled medications, any why are they scheduled?

Definition:

- “controlled substance” is generally a drug or chemical whose manufacture, possession, or use is regulated by a government, such as illicitly used drugs or prescription medications that are designated a Controlled Drug”

Safety

- They are dangerous, why?
  - They are habit forming
    - Lead to addiction, dependence
    - Overdose
    - Death
What is a controlled substance?

- “controlled substance is generally a drug or chemical whose manufacture, possession, or use is regulated by a government, such as illicitly used drugs or prescription medications that are designated a Controlled Drug.”

- My definition:
  - A dangerous medication that should only be prescribed by your doctor IF needed.
What is tolerance? What is dependence?

- **Tolerance:**
  - Taking an opioid medication for long time, and the pain is worse than before starting the medication.

- **Withdrawal:**
  - If stop taking the opioid medication, or less amount, it leads to side effects, like sweating, diarrhea, trouble sleeping, ache all over body

- **Addiction:**
  - Someone who takes opioid medication, needs to take more of the medication for same effect, saves up medications to take at once, spends lots of time to obtain medication under any circumstances
Epidemiology

- **CDC facts: ECONOMIC IMPACT**
  - 55 billion in health and social costs related to prescription opioid abuse each year SPENT
  - 20 billion in ER and inpatient care for opioid poisonings SPENT
On an average day in the US:

- More than 650,000 opioid prescriptions dispensed
- 3,900 people initiate nonmedical use of prescription opioids
- 580 people initiate heroin use
- 78 people die from an opioid-related overdose
Opiate use disorder

- **Uptodate online definition:**
  - “is typically a chronic, relapsing illness, associated with significantly increased rate of morbidity and mortality”.

- Opioids, are used medically for pain relief

- They have analgesic and CNS depressant effects, as well as the potential to cause euphoria. (up to date) “
opiate

- **Natural** or **synthetic substances** that act on one of the three main opioid receptors (mu, kappa, delta)

- Slang terms for opioid use:
  - Intranasal: snorting, sniffing
  - IV: shooting up or mainlining
  - Subcutaneous use: skin popping
  - Intramuscular use: muscling

- Slang terms for heroin: dope, horse, smack, China white, junk, tar
Natural vs synthetic vs semi-synthetic opioids

- Three of these classes, natural opiates, semi-synthetic opioids, and synthetic opioids are commonly referred to as narcotic, or painkilling opioid drugs.
  - Naturally occurring opiates, (there more than 25 alkaloids) but morphine and codeine are the only two used as narcotic opiate analgesics.
  - All other opioid analgesic medications are either semi- or fully-synthetic and are not found in nature.
  - E.g semi-synthetic opioids such as hydrocodone, hydromorphone, oxycodone, and oxymorphone
  - Synthetic: such as methadone and fentanyl are synthesized
  - In clinic: Percocet (oxycodone-acetaminophen), Vicodin (hydrocodone-acetaminophen), endocet (oxycodone-acetaminophen), dilaudid
Mechanism of action for opioid

- Opioids active specific transmembrane neurotransmitter receptors (mu, kappa, delta) that couple G proteins

- Than G proteins initiate cascade of intracellular events
- Stimulation of G proteins occur
- Signal transduction
- End result: activation of endogenous my opioid records leads to the opioid effects of reward, withdrawal, analgesia.
- There receptors are located in both CNS and PNS.

- Up to date online
Scheduled medications I-V
CDC/DEA websites

“Schedule I drugs, substances, or chemicals are defined as drugs with no currently accepted medical use and a high potential for abuse. Some examples of Schedule I drugs are:

- heroin
- lysergic acid diethylamide (LSD)
- marijuana (cannabis)
- 3,4-methylenedioxymethamphetamine (ecstasy)
- methaqualone
- peyote
Schedule II drugs, substances, or chemicals are defined as drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. These drugs are also considered dangerous. Some examples of Schedule II drugs are:

Combination products with less than 15 milligrams of hydrocodone per dosage unit (Vicodin), cocaine, methamphetamine, methadone, hydromorphone (Dilaudid), meperidine (Demerol), oxycodone (OxyContin), fentanyl, Dexedrine, Adderall, and Ritalin
Schedule III

Schedule III drugs, substances, or chemicals are defined as drugs with a moderate to low potential for physical and psychological dependence. Schedule III drugs abuse potential is less than Schedule I and Schedule II drugs but more than Schedule IV. Some examples of Schedule III drugs are:

e. g. Products containing less than 90 milligrams of codeine per dosage unit (Tylenol with codeine), ketamine, anabolic steroids, testosterone
**Schedule IV**

*Schedule IV drugs*, substances, or chemicals are defined as drugs with a low potential for abuse and low risk of dependence. Some examples of Schedule IV drugs are:

- e.g. Xanax, Soma, Darvon, Darvocet, Valium, Ativan, Talwin, Ambien, Tramadol
Schedule V drugs are defined as drugs with lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics. Schedule V drugs are generally used for antidiarrheal, antitussive, and analgesic purposes. Some examples of Schedule V drugs are:

- Cough preparations with less than 200 milligrams of codeine or per 100 milliliters (Robitussin AC),
- Lomotil,
- Motofen,
- Lyrica,
- Parepectolin,
- etc.
Why do we prescribe opioids?

- Pain, sleep, depression?
- Patients answer all yes to these.
- How do they obtain them?
Visualization of clinical problem AND solution
Patient cases:

Patient #1 SS
- 32 year old female with low back pain, tobacco dependence, obesity, fell on coccyx, anxiety
- Meds:
  - Duloxetine 60 mg daily
  - Diazepam 10 mg bid
  - Endocet 5/325 twice a day as needed
- Social:
  - Occasional ETOH, daily marijuana user
  - Failed conservative tx, PT, injections

Patient #2 MM
- 32 year old male with chronic back pain, occupation: camera men at Gillette stadium, failed conservative tx, PT, radio frequency ablation
- MRI: lumbosacral spondylosis without myelopathy
- Meds:
  - Baclofen 10 mg tid daily
  - Diazepam 5 mg twice per day
  - Fentanyl 25 mcg/hr transdermal patch q72 hours
  - Tramadol 50 mg, 2 tablets tid as needed
- Social:
  - Daily cigarette smoker, social drinker
Patient cases cont.

Patient #3 PF

- 41 year old male, new patient to our practice, in wheelchair
- Pmhx: anxiety/depression, chronic pain syndrome, morbid obesity
- Meds:
  - Effexor 150 mg xr daily
  - Oxycodone 30 mg tablets 5 times per day
  - Oxycontin 80 mg tablet (240 mg in AM, 160 mg noon, 240 mg bedtime)
  - Trazodone 50 mg QPM
  - Xanax 0.5 mg BID

The common factor in these patients, and why was I concerned?

- Daily narcotics for more than 3 months
- Safety
- Death of patient
- Patient satisfaction
Acute vs chronic pain

Within the past 1-2 weeks
- Broken leg
- Abscess
- Tooth pain
- Post op CABG
- Post op hip surgery
- Post op Cholecystectomy

> 3 months
- Cancer
- Palliate care
More facts:

Research shows that many non-medical users obtain prescription medications from family and friends.
Side effects of opioid

- Constipation, GI issues
- Depression, anxiety, memory issues
- Heart attack
- Low hormones, testosterone
- Breathing troubles
- Death
Clinic Urine drug screens different EMR

- Urine toxicology RANDOM
- Comprehensive urine drug screen
- Pain panel urine screen
Opiate problem

Overdose Deaths Involving Opioid Analgesics, Cocaine and Heroin: United States, 1999–2010

Note: Not all overdose deaths specify the drug(s) involved, and a death may involve more than one specific substance.

The rise in 2005-2006 in opioid deaths is related to non-pharmaceutical fentanyl (see http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5729a1.htm). * Heroin includes opium.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2010 on CDC WONDER Online Database, released 2011. Extracted on February 11, 2013.
Epidemiology cont
Basic chronic pain recommendation
BIG picture

- “Chronic pain should be managed primarily with non-pharmacologic therapy or with medications other than opioids.
- Physicians should routinely discuss the risks and benefits of therapy and the mutual responsibility to mitigate risk with patients who are receiving opioids.
- When opioids are prescribed, they should be titrated to the lowest effective dosage.
- Treatment should be offered or arranged for patients with opioid use disorder.”

From the AFP Editors
CDC guideline for prescribing opioids for chronic pain 2016

Recap of background

- 20% of patients present to PCP office with non-cancer symptoms and receive opioid prescription
- In 2012, health care providers wrote 259 million prescriptions for opioid medications
- Opioid prescription per capita increased 7.3% between 2007-2012

Guidelines

- Are intended:
  - to improve communication between clinicians, and pts about the risks and benefits of opioid therapy
  - improve safety, effectiveness of the pain tx and
  - help reduce risks for opioid use disorder, overdose, death
Birth of these guidelines

These categorization of recommendations were based on the following assessment:

1) There is no evidence that showed long term benefit of opioids in pain and function, vs no opioids for chronic pain (examined in randomized studies, 1 year later)

2) Extensive evidence showed harms of opioids, e.g. overdose, motor vehicle injury, opioid use disorder

3) Less harm was seen, with benefits of non pharmacologic and non opioid pharmacologic treatments, compared to long term opioid therapy
1. Non pharmacologic therapy and non opioid therapy are preferred for choric pain. (If opiate therapy needed, combine with exercise, multimodal, multidisciplinary-biopsychosocial approaches)

2. Before starting opioid therapy for chronic pain, establish realistic goals, for pain and function, concurrent comorbidities assessment, depression, anxiety

3. Frequent follow ups, re-emphasize risks and benefits, involve patients in decision making

4. If opiate tx needed, start with immediate release opioids instead of extended release (like methadone, fentanyl). Higher risk of overdose eith ER/LA.

5. Start with lowest effective dose

6. Long term opioid use begin with tx of acute pain, lowest effective dose, 3 days or less, more than 7 days rarely needed

7. Clinicians should re-evaluate benefits/harms within 1-4 weeks after starting opioid therapy, do not continue “just in case pain continues”.

8. re-evaluate risk factors, offer naloxone, refer to behavioral health, increase dose?, other medical problems, sleep apnea

9. Clinicians REVIEW PDMP for potential dangerous drug combinations, compliance
10. Drug testing when prescribing opiate medication, at least annually
11. Physicians should avoid prescribing concurrent opioid medications and BZDs
12. Clinicians should offer or arrange evidence based treatment (MAT, medication assisted treatments, with buprenorphine or methadone, in combination with BH therapies
CDC chronic pain prescription guidelines

Department of health

Prescription Monitoring Program

Massachusetts Prescription Monitoring Program

Mission
The Massachusetts Prescription Monitoring Program (MA-PMP) is a state-wide program that collects and distributes information on Schedule II through V controlled substances dispensed or prescribed to a patient. The program is mandated by law and was established in 1999 to prevent prescription drug misuse and abuse.

Contact Us
For more information, visit the Massachusetts Department of Public Health website or contact the Prescription Monitoring Program at 1-800-599-7008.
Recommendations

Massachusetts
Recommendations

1) 7 day restriction on the supply of opioids that may be prescribed when used in patients for first time

2) Partial fill of opioids at patient’s direction

Change As of 10/15/16

All MA prescribers seeing to prescribe schedule II or III narcotics or BZDs to a patient for the first time must research that pt’s prescribing hx of the PMP.

Now, all prescribers will need to check PMP prior to issuing every Schedule II or III narcotic medication.
Types of medications for pain acute vs chronic

- **Acute**
  - NsAIDs, support care, conservative tx, PT, OMM and alternative medicine (chiropractor, acupuncture)

- **Chronic**
  - More than 3 months, failed conservative tx, PT, intervention pain management, specialists
Reality in family medicine clinic

staffing
medical assistants
team work
time, 15 minutes per patient
controlled substance agreement
And more reality

patient satisfaction vs safety of treatment scheduling non compliance
Professional take home messages

Clinical Thoughts 1)
- Ask questions
- Communicate with specialists
- Do not criticize
- From NBOME 2016
- “anticipate and support other team members’ needs through accurate knowledge about their responsibilities and workload and provide empathy and support for other members of the interprofessional collaborative team”.

Clinical thoughts 2)
- Assist patients with healthcare system complexities
- Do not judge, educate patients
- Discuss Risks and benefits
- Follow up frequently
- Controlled substance contracts
- Set goals with patients
- Portal
- Help medical students, residents with clinical picture
- We’re human
- It’s a work in progress
resources
- Up to date online
- AAFP
- CDC
- Pain medicine news
- NOT Wikipedia

links
- [http://www.cdc.gov/drugoverdose/data/analysis.html](http://www.cdc.gov/drugoverdose/data/analysis.html)
- [http://www.cdc.gov/drugoverdose/prescribing/providers.html](http://www.cdc.gov/drugoverdose/prescribing/providers.html)
Thank you for your attention.

Questions? Thoughts.
Memories

UNECOM White coat ceremony

ACOFP conference 2013 2nd place, Philadelphia, PA