Opioids and Chronic Pain

CRIT/FIT 2014

April 2014

Daniel P. Alford, MD, MPH, FACP, FASAM Associate Professor of Medicine Assistant Dean, Continuing Medical Education Director, Clinical Addiction Research and Education (CARE) Unit





Boston University School of Medicine



Bad News and Good News



My Biases

- Opioids...
 - can be effective for some
 - can be harmful for some
 - can be prescribed safely
- Physicians <u>can be</u> and <u>want to be</u> trained to prescribe opioids for chronic pain safely and competently

"To reduce the impact of pain and suffering...require a transformation in **how pain is perceived and judged**...by **people with pain** and by <u>health care providers</u> ..."



A Blueprint for Transforming Prevention, Care, Education, and Research

INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMICS

- Pain care must be tailored to each person's experience
- Chronic pain can be a disease in itself
- Barriers to adequate pain care
 - Negative attitudes about people with pain
 - Disparities in pain care due to stereotyping and biases
 - Insurance and reimbursement issues
 - Regulatory, legal, educational and cultural barriers inhibiting the medically appropriate use of opioid analgesics

Building Trust

Patient Issues





Often demonstrated by exaggerating...
pain scores: "on a scale of 0-10...I am a 20"
functional limitations: "I can't do anything"

Building Trust

Patient Issues



Fear that opioid analgesics will be reduced or stopped

Fear that clinician may decrease efforts to diagnose the cause of the pain

Evers GC, et al. Support Care Cancer. 1997 Nov;5(6):457-60.

Building Trust

Clinician Issues

- Assume patient fears you think pain is not real or not very severe
- After you take a thorough pain history...



Prescription Opioid Sales, Deaths and Substance Abuse Treatment Admissions



National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

Rx Opioids Primary Driver of ODs 2010



Dose and Overdose Risk



Group Health Consort Study, 1997-2005; Dunn KM, et al. Ann Intern Med. 2010 Jan 19;152(2):85-92.

Opioid Efficacy in Chronic Pain

- Most literature surveys & uncontrolled case series
- RCTs are short duration <8 months w/ small samples <300 pts
- Mostly pharmaceutical company sponsored
- Pain relief modest
 - Better analgesia with opioids vs control in all studies (statistically significant)
- Mixed reports on function
- Addiction not assessed

Balantyne JC, Mao J. NEJM 2003 Kalso E et al. Pain 2004 Eisenberg E et al. JAMA. 2005 Furlan AD et al. CMAJ 2006

Not all Chronic Pain is Opioid Responsive

Proportion of Patients with at least 50% Pain Relief, Oral Opioids, Follow-up 7.5 months (mean) to 13 months ($1^2 = 77.3\%$)

Study Name	Statistics	foreach	Proportion				
	Event rate	Lower limit	Upper limit	Total			
Zenz 1992	0.510	0.413	0.606	51 / 100		+	
Allan 2005	0.392	0.341	0.445	134 / 342		+	
	0.443	0.333	0.559			•	
					0.00	0.50	1.00

N=442 44.3% of participants had at least 50% pain relief

Noble M et al. Cochrane Systematic Reviews 2010

The Problem...variable opioid response

Mu Receptor

- Mu receptor subtypes
- >100 polymorphisms in the human MOR gene

Opioid metabolism

- Differs by individual opioid and by individual patient
- Not all chronic pain responds to opioids
- Not all pain responds to same opioid in the same way
- Trial of several opioids may be needed to find acceptable balance between analgesia and tolerability

Patients often have unrealistic expectations that...

Opioids always equal chronic pain relief *therefore* more opioids equal more pain relief

Which often results in unsanctioned dose escalation or continued requests for higher doses

Need to re-educate:

- Realistic goals
- Potential severe risks and harm with opioids

Opioid Safety and Risks

- Allergies are rare
- Side effects are common
 - Nausea, sedation, constipation, urinary retention, sweating
 - Respiratory depression sleep apnea
- Organ toxicities are rare
 - Suppression of hypothalamic-pituitary-gonadal axis
 - >50 mg (MSO₄ equivalents) assoc w/ 2X increase in fracture risk
- Worsening pain (hyperalgesia in some patients)
- Addiction
- Overdose
 - at high doses
 - when combined w/ other sedatives

Saunders KW et al. J Gen Med 2010, Dunn KM et al. Ann Intern Med 2010 Li X et al. Brain Res Mol Brain Res 2001, Doverty M et al. Pain 2001, Angst MS, Clark JD. Anesthesiology 2006

Opioid Misuse/Addiction Risk

- Published rates of abuse and/or addiction in chronic pain populations are 3-24%
- <u>Known risk factors</u> for addiction to any substance are <u>good</u> <u>predictors</u> for problematic prescription opioid use
 - Young age
 - Personal history of substance abuse
 - Illicit, prescription, alcohol, nicotine
 - Family history of substance abuse
 - Legal history (DUI, incarceration)
 - Mental health problems

Akbik H et al. JPSM 2006 Ives T et al. BMC Health Services Research 2006 Liebschutz JM et al. J of Pain 2010 Michna E el al. JPSM 2004 Reid MC et al JGIM 2002

Is the my patient addicted?

- Physical dependence
 - Biological adaptation
- Opioid Use Disorder (DSM V)
 - Behavioral maladaptation+/- Biological
- Addiction (4 C's)
 - Behavioral maladaptation
 - Loss of Control
 - Compulsive use
 - Continued use despite harm
 - Craving

Aberrant Medication Taking Behaviors (Pattern & Severity)

Aberrant Medication Taking Behaviors *The Spectrum of Severity*

Requests for increase opioid dose

Requests for specific opioid by name, "brand name only"

Non-adherence w/ other recommended therapies (e.g., PT)

Running out early (i.e., unsanctioned dose escalation)

Resistance to change therapy despite AE (e.g. over-sedation)

Deterioration in function at home and work

Non-adherence w/ monitoring (e.g. pill counts, urine drug tests)

Multiple "lost" or "stolen" opioid prescriptions

Illegal activities – forging scripts, selling opioid prescription

Aberrant Medication-Taking Behaviors

Differential Diagnosis

Pain Relief Seeking

- Disease progression
- Poorly opioid responsive pain
- Withdrawal mediated pain
- Opioid analgesic tolerance
- Opioid-induced hyperalgesia



Drug Seeking

- Addiction
- Other psychiatric diagnosis
- Criminal intent (diversion)

When Are Opioids Indicated?

- Pain is moderate to severe
- Pain has significant impact on function and quality of life
- Non-opioid pharmacotherapy has been tried and failed
- Patient agreeable to...
 - take opioids exactly as prescribed (e.g., no unsanctioned dose escalation)
 - have opioid use closely monitored (e.g. pill counts, urine drug testing)

Opioid Choice

Short-acting

- Codeine
- Hydrocodone
- Hydromorphone
- Morphine
- Oxycodone
- Oxymorphone

Long-acting

- Fentanyl transdermal
- Extended release morphine
- Extended release oxycodone
- Extended release oxymorphone
- Extended release hydrocodone
- Methadone

Insufficient evidence to determine whether long-acting opioids are more effective or safer than short-acting opioids

Chou R et al. J Pain Symptom Manage 2003, Argoff C, Silvershein DI. Mayo Clin Proc. 2009

Currently there are NO proven abuse resistant opioids or formulations

Stanos SP et al. Mayo Clin Proc. 2012;87(7):683-694.

Methadone is Different



CDC, Morbidity and Mortality Weekly Report (MMWR) July 6, 2012 / 61(26);493-497.

"Universal Precautions"

(not evidence-based but has become "standard" of care)

- Agreements "contracts", informed consent
- Monitor for benefit and harm with frequent face-toface visits
- Monitor for adherence, addiction and diversion
 - Urine drug testing
 - Pill counts
 - Prescription monitoring program data

FSMB Guidelines 2004 www.fsmb.org Gourlay DL, Heit HA. Pain Medicine 2005 Chou R et al. J Pain 2009

What is the clinician's role?



Nicolaidis C. Pain Medicine 2011

The Risk-Benefit Framework Judge the opioid treatment, not the patient

NOT...

- Is the patient good or bad?
- Does the patient deserve opioids?
- Should this patient be punished or rewarded?
- Should I trust the patient?

RATHER... Do the benefits of opioid treatment outweigh the untoward effects and risks for this patient (or society)?

Assessing Benefit: PEG scale

1.	1. What number best describes your pain on average in the past week:										
	0	1	2	3	4	5	6	7	8	9	10
	No pai	in									Pain as bad as you can imagine
2. W	2. What number best describes how, during the past week, pain has interfered with your <u>enjoyment of life</u> ?										
	0	1	2	3	4	5	6	7	8	9	10
	Does r interfe	not re									Completely interferes
3. What number best describes how, during the past week, pain has interfered with your general activity?											
	0	1	2	3	4	5	6	7	8	9	10
	Does r interfe	not re									Completely interferes

Assessing Risk: Opioid Risk Tool

	Female	Male	
Family history of substance abuse			
Alcohol	D 1	□3	
Illegal drugs	2	□3	
Prescription drugs	4	4	
Personal history of substance abuse			
Alcohol	□3	□3	
Illegal drugs	4	4	
Prescription drugs	⊒5	□ 5	
Age between 16-45 years	D 1	□ 1	
History of preadolescent sexual abuse	□3	D 0	
Psychological disease			Scoring
ADHD, OCD, bipolar, schizophrenia	2	2	4-7 moderate risk
Depression	D 1	D 1	>8 high risk

Webster LR, Webster RM. Pain Medicine, 2006

Opioid Misuse Risk Stratification

Discuss level of concern with patient

 "Despite being in recovery from alcoholism, you are at higher risk for developing problems with the opioid pain medication."

Level of monitoring that should be implemented

- Frequency of visits, urine drug testing, etc.
- High risk patients may need to agree to random call-backs

Need for pain and/or addiction consultant

If available

Some patients may be too risky for opioids analgesics

• e.g., patient with recent opioid addiction

Discussing Monitoring with Patients

- Discuss risks of opioid medications
- Assign responsibility to look for early signs of harm
- Discuss agreements, pill counts, drug tests, etc. as ways that you are helping to protect patient from getting harmed by medications
 - Thiazide diuretic K monitoring analogy
- Use consistent approach, but set **level of** monitoring to match risk

Monitoring Urine Drug Tests

- Evidence of therapeutic adherence
- Evidence of non-use of illicit drugs
- Know limitations of test and your lab
- Know a toxicologist/clinical pathologist
- Complex, but necessary, patient-physician communication
 - If I send your urine right now, what will I find in it...
 - Your urine drug test was abnormal, can you tell me about it...
- Document time of last medication use
- Inappropriate interpretation of results may adversely affect clinical decisions

Gourlay DL, Heit HA, Caplan YH. Urine drug testing in primary care. Dispelling myths and designing strategies monograph (www.familydocs.org/files/UDTmonograph.pdf)

Monitoring Pill Counts

- Confirm medication adherence
- Minimize diversion
- My strategies...
 - 28 day (rather than 30 day) supply
 - All patients expected to bring remaining pills at each visit
 - If patient "forgets" pills, schedule return visit with in a week
 - For "high risk" patient, use random call-backs



Continuation of Opioids

- You must convince yourself that there is benefit
- Benefit must outweigh observed harms
- If small benefit, consider increasing dose as a "test".
- If no benefit, hence benefit cannot outweigh risks so STOP opioids. (Ok to taper and reassess.)
- You do not have to prove addiction or diversion only assess Risk-Benefit ratio

Exit Strategy Discussing Lack of Benefit

- Stress how much you believe / empathize with patient's pain severity and impact
- Express frustration re: lack of good pill to fix it
- Focus on patient's strengths
- Encourage therapies for "coping with" pain
- Show commitment to continue caring about patient and pain, even without opioids i.e., you are abandoning (discharging) an ineffective treatment, <u>not</u> the patient
- Schedule close follow-ups during and after taper

Exit Strategy Discussing Possible Addiction

- Give specific and timely feedback why patient's behaviors raise your concern for possible addiction
- Benefits no longer outweighing risks
 - "I cannot responsibly continue prescribing opioids as I feel it would cause you more harm than good."
- Always offer referral to addiction treatment
- Stay 100% in "Benefit/Risk of Med" mindset

Using Risk Benefit Framework



Useful to Avoid Pitfalls...

- "But I really, really need opioids."
- "Don't you trust me?"
- "I thought we had a good relationship/I thought you cared about me."
- "If you don't give them to me, I will drink/use drugs/hurt myself."
- "Can you just give me enough to find a new doc?" **RESPONSE:**

"I cannot a prescribe a medication that is not helping you (or is hurting you)."

Summary

- Opioids can be effective and safe but are imperfect
- Use risk/harm benefit framework
- Use consistent approach, but set level of monitoring to match risk
- Judge the treatment and not the patient
- If there is benefit in the absence of harm, continue opioids
- If there is no benefit or if there is harm, discontinue opioids

www.scopeofpain.com





How to:

- determine when opioid analgesics are indicated
- assess for opioid misuse risk
- talk to patients about opioid risks and benefits
- monitor and manage patients on long-term opioid therapy

Case Study: Mary Williams

- 42 year old female
- Hypertension
- Type 2 diabetes with painful neuropathy
- Chronic low back pain



Hello Alford Daniel | (Log out

Return to program Homepage

BOSTON

Edit Profile

Videos

SCOPE of Pain Safe and Competent Opioid Prescribing Education

- I: Starting opioids, discussing monitoring
- II: Assessing aberrant opioid taking behavior, increasing monitoring
- III: Addressing lack of opioid benefit and excessive risk, discontinuing opioids
- IVa: Inherited Patient on High Dose Opioids, Part A
- IVb: Inherited Patient on High Dose Opioids, Part B
- V: Established Patient with Evidence of Illicit Drug Use
- VI: PDMP Questionable Activity in an Established Patient
- VII: PDMP Questionable Activity in a New Patient







Paul Russo

- 48 year old man with chronic posttraumatic knee and ankle pain s/p infected compound fractures after a motorcycle accident 5 years ago.
- Current Pain Medications:
 - Hydrocodone 5 mg/acetaminophen 325 mg 2 tablets 3x/day
 - Ibuprofen 800 mg 3x/day
- His pain is always 4-5 out of 10.
- His cashier job allows him to sit most of the day.
- Despite denying illicit drug use, his urine drug test was positive for cocaine (and hydrocodone)...
 - Should you "fire" the patient for lying about his cocaine use?
 - Should you discontinue his opioids?