A facilitated discussion

Acute pain management and the role of community-based efforts

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Yakima Prevention Summit 2018
6/17/2017
Objectives

• Review SUD (per DSM 5) = WORDS MATTER
• Words matter – review SUD (per DSM 5)
• Overdoses underestimate the problem
• Provider interventions
• Public Health Interventions
• Discuss community interventions
• Discuss family interventions
Pain management plan

• Rational plan / rational prescribing* (*if indicated)

• Physical methods
  - ice packs, heat, massage

• Pharmacotherapy
  - Therapeutics & analgesics / OTC & Rx

• Goal of therapy = pain relief & earlier return to function
  - Discussion with pt
  - Handout instructions?
Ibuprofen + acetaminophen

• Ibuprofen every 6 hours
  • 400mg for analgesia
  • 400, 600, 800mg for anti-inflammatory
    • Side effects dose related – nausea, dyspepsia, gastric bleeding

• Acetaminophen every 6 hours
  • 500mg or 650mg

• Tough spot = Ibuprofen 800mg + acetaminophen 1,000mg every 6 hours
  short duration, hepatic & renal risks
Substance Use Disorders

*Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-5)*:

- The terms substance abuse/substance dependence have been abandoned

- Replaced by substance use disorder
  - Categorized as mild, moderate, or severe
  - Determined by the number of diagnostic criteria met
Substance Use Disorder Criteria

**Two of four required**

1. **Impaired control**
   - Using for longer periods of time than intended
   - Using larger amounts than intended
   - Wanting to reduce use but not able
   - Spending excessive time getting/using/recovering from drug,
   - Intense cravings

2. **Social impairment**
   - Repeated involvement with a substance or activity, despite the substantial harm it now causes to relationships or ability to function (e.g. work)

Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
3. Risky use
   • Repeated use in physically dangerous situations or use despite knowledge that the drug is causing or worsening physical and psychological problems

4. Pharmacological indicators
   • Tolerance: need to increase the amount of a substance to achieve the same desired effect
   • Withdrawal: cluster of unpleasant and/or fatal symptoms after abrupt cessation of drug

Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
Helping to Build Healthy, Resilient Families

- Importance of Adverse Child Experiences (ACEs)
- Trauma Informed
- Harm Reduction

Provider Training (Free CME)

- Informing on the Opioid Crisis
- CDC Pain Management Guidelines
- Bree Initiative Guidelines for Dentists
- Buprenorphine/naloxone waiver certificate training

Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
Which illicit drug is associated with the majority of overdose deaths?

A. Alcohol
B. Heroin
C. Crack Cocaine
D. Methamphetamines

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Known Relation Between Health Outcomes for Persons who Overdose

1 Death
10 Recovery Admissions\(^1\)
32 Emergency Dept. Visits\(^2\)
132 Abusing or Dependent on Opioids\(^3\)
825 Non-Medical Opioid Misusers\(^3\)


References:
In 2015 there were 89,000 live births in WA

Infants included are those born to mothers receiving appropriate treatment for drug use, mother’s receiving prescriptions for other health conditions, or misusing drugs. Use of opioids, benzodiazepines, antidepressants, barbiturates and alcohol can result in infant drug withdrawal.

Limitations: Excluded are infants born outside of WA or at a federal facility, or infants identified with NAS after release from birth hospitalization. The effect of hospital transports and home births is unknown.

Definition: 2000-Q32015 ICD9CM diagnosis code 779.5; Q42015-2016 ICD10CM diagnosis code P96.1
What % of opioid overdose survivors in Snohomish County overdosed on their own prescription pain medications?

A. 5%
B. 6%
C. 8%
D. 14%
E. 22%
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Public Health Interventions

Prevention

Treatment

Support
“10 Things to Know” Campaign

1. Know your meds, store your meds
2. Talk to seniors
3. Learn about addiction
4. Talk to your kids
5. Take back your unwanted meds
6. Get involved
7. Give responsibly
8. Talk to your provider
9. Know how to help, support
10. Know who to call

Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
Public Health Interventions

• Established secure medication take-back program

• Made available secure home medication bags

• Made available and distributed safe needle-cleanup kits

• Increased naloxone availability
Public Health Interventions

- Focus groups with stakeholders (e.g., physicians, pharmacists, dentists, veterinarians)
- Support and potentially expand syringe-exchange program
- Free Hepatitis C testing at syringe exchange and jail
The primary focus of syringe exchange programs is to...

- Reduce environmental impact of IVDU
- Reduce blood-borne pathogen transmission
- Build trusting relationship to offer treatment options when users are ready
- Reducing overdose deaths by providing naloxone

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• Reduce blood-borne pathogen transmission

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• Reducing overdose deaths by providing naloxone
Syringe-Exchange Programs

- Increase entry into treatment programs
- Reduce needle-stick injuries through environmental impact
- Decrease local crime
- Reduce overdose deaths teaching naloxone use
- Decrease bloodborne pathogen transmission


Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
How many of new heroin users started out misusing their prescription painkillers?

a) 1 in 5
b) 2 in 5
c) 3 in 5
d) 4 in 5
e) 5 in 5


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Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
What is the probability in one year that a patient on a 5-day course of opioids for pain control will continue to seek opioids?

a) 1%
b) 3%
c) 5%
d) 10%


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Prescription Monitoring System

• Established 2007

• Dispensing records for Schedule II through V drugs

• Checking is voluntary

• Medical Quality Assurance Commission tracks

• Legislation requiring mandatory checking being considered

Slide courtesy of Mark Beaty, MD Medical Officer, Snohomish County
• PAIN-OUT acute-pain registry database to examine perioperative pain management; 4 American hospitals ($N = 473$); 20 European institutions ($N = 8799$) participating

• 98% of American patients opioids postoperative day one compared to 70.2% of Europeans

• 41% received regional analgesia compared 16% of Europeans
• Mean Worst Pain (± SD) for Europeans 5.4 (2.5) Americans 7.4 (2.7), $p < .0001$
  ➢ Europeans also reported significantly less emotional discomfort and
  ➢ less interference of pain with activity

• *European patients report better pain-control despite lower use of opioids and regional anesthetic*
Pain Management

• Consider alternative treatments
• Discuss risks and benefits with the patient
  ➢ Set realistic expectations
• First-time opioid prescriptions should be as short as possible
• Advise patients to lock up medications and discard when no longer needed
• Consult specialist for treatment of chronic pain
WA state “Take back your meds” program

Unwanted meds in home harm others

Safe disposal of medicines

Not all accept controlled rx

Pharmacies & police stations

Mostly King, Pierce & Snohomish counties

FDA guideline for safe disposal of medicines

https://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/ensuringsafeuseofmedicineosalofmedicines/

http://www.takebackyourmeds.org/
• At risk pts should be screened for SUD
• Use NSAIDs and acetaminophen as backbone for pain management
• Opioid if warranted – lowest dose, shortest time that an opioid is needed
• Storage & disposal instructions
• Five-day opioid prescription for acute pain has 10% risk of continued opioid-seeking
Epidemiology of opioid crisis: Cross-cutting, multifactorial, cultural problem

Magnitude is being defined but outstrips currently available resources

Five-day opioid prescription for acute pain has 10% risk of continued opioid-seeking

Brain retains plasticity up to age 24

Things to think about
Thank you

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Alcohol Use Trends, Grade 6

- Current (past 30-day) alcohol use
- Ever drank alcohol
- Binge drinking

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</thead>
<tbody>
<tr>
<td>Current (past 30-day) alcohol use</td>
<td>7% ±1</td>
<td>7% ±1</td>
<td>6% ±1</td>
<td>5% ±1</td>
<td>4% ±1*</td>
<td>3% ±1</td>
</tr>
<tr>
<td>Ever drank alcohol</td>
<td>34% ±2</td>
<td>34% ±2</td>
<td>33% ±2</td>
<td>30% ±2*</td>
<td>25% ±2*</td>
<td>23% ±2*</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>N/A</td>
<td>N/A</td>
<td>6% ±1</td>
<td>6% ±1</td>
<td>5% ±1</td>
<td>4% ±1</td>
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Problem or Heavy Drinking

Students who report drinking 3 or more days in the past month and/or one or more binge drinking episodes*

% of Students

6th: 4%
8th: 10%
10th: 19%
12th: 24%

*Binge drinking is drinking 5 or more drinks in a row in the past two weeks.
Student Abuse of Painkillers (in last 30 days)
Students who report using painkillers* to get high at least once in the past month

<table>
<thead>
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<th>Class</th>
<th>% of Students</th>
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<tbody>
<tr>
<td>8th</td>
<td>4%</td>
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<tr>
<td>10th</td>
<td>7%</td>
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<tr>
<td>12th</td>
<td>9%</td>
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</tbody>
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*painkillers like Vicodin, OxyContin (sometimes called Oxy or OC) or Percocet (sometimes called Percs)
**Students Misuse of Someone Else's Prescription (in last 30 days)**

Students who report using prescription drugs not prescribed to them in the past month

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<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>8th</td>
<td>6%</td>
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<tr>
<td>10th</td>
<td>11%</td>
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<td>12th</td>
<td>13%</td>
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</table>
My parents would think it was wrong if I used prescription drugs not prescribed for me.

I risk harming myself if I use prescription drugs that are not prescribed for me.

<table>
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<th>% of Students</th>
<th>8th</th>
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<th>12th</th>
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<tbody>
<tr>
<td></td>
<td>33%</td>
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My friends would think it was wrong if I used prescription drugs not prescribed for me.
no rx ↔ NSAIDs ↔ acetaminophen ↔ opiates

• Mild to moderate, uncomplicated, nonpsychogenic pain
  • OTC analgesics = first line of therapy

• Simple analgesics – NSAIDs, acetaminophen

• Maximize non-opiate when possible

• Opiates as “rescue” meds
Pharmacotherapy plan - opiates

- Use a balanced approach
- Risk / benefit analysis

- NSAID/acetaminophen backbone when indicated
- Opiates as needed

- No need to start with less potent before attempting a more potent analgesic (i.e. opiate)
**NSAID**

- **Ibuprofen** (propionic class of NSAIDS)
  - 200mg analgesia, not anti-inflammatory
  - 400, 600, 800mg q 6 h
  - Side effects dose related – nausea, dyspepsia, gastric bleeding

- **Naproxen** (Naprosyn, Naprelan) 500mg initially, 250mg subsequently
- **Naproxen sodium** (Anaprox) 550mg initially, 275 subsequently (propionic acid class)

- **Sulindac** (Clinoril®) *less effect on bleeding* (salicylate salt)
- **Ketorolac** *(Toradol® limit to 5 days)* (pyrroacetic acid)
- **Indomethacin** *(indoleacetic acid)*
Anticoagulants - NSAIDs adverse drug interactions

• AVOID the combination w/ NSAIDS
  • 2.4x risk of major bleed

apixaban    Eliquis®
dabigatran  Pradaxa®
rivaroxaban  Xarelto®
warfarin    Coumadin® & other names
anti-hypertensives - NSAIDs adverse drug interactions

Risk of NSAID co-administration with anti-hypertensives

- Risk of increase in BP usually limited to <10 mm Hg
- Can result in 50% reduction in efficacy of antihypertensive drug
- Short courses of NSAID of less than 1-2 weeks are unlikely to cause a clinically important increase in a patient's BP
- Short courses of NSAIDs may cause exacerbation of heart failure
- Low-dose aspirin therapy does not appear to affect the efficacy of antihypertensive drugs or diuretics
NSAIDs

- Renal adverse effects

- NSAIDs
  - Metabolized by liver
  - Highly protein bound *(avoid w/ warfarin)*
  - Old age no affect on elimination
  - Renal impairment no effect on pharmacokinetics
Acetaminophen

• Hepatic adverse effects of acetaminophen are well known

• Acetaminophen
  • Careful about pt self-medicating
  • Essential a pt not exceed 4g acetaminophen in 24 hrs
  • June 2009 FDA recommended labeling 24 hours limit to less than 4gm (= 3gm/24hr) – note this is self administered acetaminophen
  • One metabolite is hepatotoxic & nephrotoxic
  • May accumulate in liver impairment
  • Caution in alcoholics & fasting eating disorders
Ibuprofen + acetaminophen

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