SESSION C1

Harm Reduction and Naloxone Distribution
Caleb Banta-Green, PhD

Session Description:

An overview of harm reduction will be provided and the specific application of harm reduction to opioid overdose prevention and intervention including distributing the antidote naloxone will be discussed.

Learning Objectives:

Following my presentation, participants will be able to:
1. Discuss harm reduction and it's relevance for health professionals.
2. Recognize trends in opiate use and harms.
3. Describe medical and public health responses to opiate overdoses.
Opioid Overdose Prevention and Response
Harm Reduction
&
The roles of medical practitioners

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Outline
• Opiate drug trends in WA
• Harm reduction
• Overdose education nationally and locally
  – Epidemiology
  – History of OD education
  – Support for adding a medical model
  – Pharmacy based models
• Case study of CPA- Kelley Ross Pharmacy- naloxone
• Basic overdose training
  – Video
  – Presentation
  – Discussion/Q&A

Opiate Overdoses in the U.S.
Epidemiology, Prevention, Intervention and Policy

Drug overdose deaths of all intents by major drug type, U.S., 1999-2009

Heroin substantially under-reported in deaths

Rx Opioids
• Prescribing appears to be leveling off for potent, long acting opioids in some states (ARCOS 2010)
• Mortality increasing nationally, declining in WA
• NSDUH indicate Rx non-medical “pain reliever” opioid use declined in 2011

Heroin
• 18 to 24-year-olds admitted to treatment for heroin increased from 42,637 in 2000 to 67,059 in 2009 (TEDS cited in [A])
• Epidemiologists in 15/21 US cities report increases in heroin, notably among young adults and outside of urban areas (NIDA CEWG June 2012)
• NSDUH data indicate the number of persons who were past year heroin users in 2011 (620,000) was higher than the number in 2007 (373,000).

Heroin substantially under-reported in deaths

Source: National Vital Statistics System. Thermometer 1999 numbers are under-reported. (Note: over-reporting deaths were not accounted in 46% for 2001-2004 of deaths reported by the CDC Center for Health Statistics [A]).


Rx to Heroin

- A relationship between misuse of prescription-type opiates and subsequent heroin use is indicated by NSDUH data* and published research** particularly adolescents and young adults
- King County 39% reported being “hooked on rx-type opiates” before they began using heroin (2009)

*C. Jones 2013 article
** Peavy et al, 2012 and Lankenau et al, 2012

Trends in Police Evidence for Heroin and Rx-type opiates

As every other substance declined,
- 512% Statewide among 18-29 year olds
- Heroin is the #1 drug in this age group
- Just public treatment, undercount overall

2,189 caseload for buprenorphine/Suboxone for 18-29 year olds (March 2012 per DOH PMP)

All of these deaths were preventable
Many of these overdoses could have been reversed before they became fatal

The majority of deaths involved prescription-type opiates

WA State, 12th Graders, 2012 Healthy Youth Survey

<table>
<thead>
<tr>
<th></th>
<th>Use Estimate</th>
<th>95% C.I.</th>
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<tbody>
<tr>
<td>Alcohol, past month</td>
<td>36.1%</td>
<td>± 2.3%</td>
</tr>
<tr>
<td>Marijuana, past month</td>
<td>26.7%</td>
<td>± 1.5%</td>
</tr>
<tr>
<td>Rx opiates, past month</td>
<td>7.5%</td>
<td>± 1.0%</td>
</tr>
<tr>
<td>Heroin, ever used</td>
<td>3.1%</td>
<td>± 1.3%</td>
</tr>
</tbody>
</table>

23% of recent users of Rx opiates to “get high” report ever using heroin, compared to 3% for those not recent using pain killers to get high

Principles of Harm Reduction

- Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use.
- Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.
- Harm reduction incorporates a spectrum of strategies from safer use, to managed use to abstinence to meet drug users “where they’re at,” addressing conditions of use along with the use itself.

http://harmreduction.org/about-us/principles-of-harm-reduction/
Background - Opiate overdoses

- Overdoses can be prevented
  - Most opiate (heroin and/or Rx) overdoses can be intervened upon before death ensues
- Low overdose knowledge
  - Risk factors; Signs of overdose; How to intervene
  - Audiences include users and family/friends as well as general population
- Bystander fear of police response may inhibit calling 911
  - Perceptions are powerful
- An antidote for opiate overdoses is available
  - Supply and access points are limited

Logic Model

Fatal opiate overdose rate is high

- O.D. knowledge low
- Antidote hard to get
- Fear of police/law

Educate public

Change law, Pharmacy practice &/or medical practice

Increase naloxone supply and access

Behaviors and practices change

Fatal opiate overdose rate is low

O.D. Knowledge

How to increase

- General awareness needed that opiate overdoses can be prevented and if they occur they can be reversed with naloxone
  - National problem, need broad awareness
  - Supply and demand need to be built
- Regular user of opiates could receive overdose education and take-home naloxone
- Family/friends of regular opiate users should also receive overdose education including how to use take-home naloxone (and get THN if not already in household)
- SAMHSA OD Toolkit

Antidote/Naloxone

Increasing access

- Medical providers could prescribe to potential overdose
  - and to potential witnesses
    - Settings: Primary care, Emergency Dept, Pharmacy, drug treatment, jail
- Insurance (public and private) could cover Rx costs
- Pharmacist could directly prescribe and dispense
  - lowers $ and increases access tremendously in terms of time burden and geography
- Collaborative practice agreement
- Overdose education and prescribing time could be reimbursed
  - SBIRT codes should allow reimbursement for education
  - Pharmacist's time educating could be reimbursed

OD Education & Naloxone distribution

- Historically focused on heroin users
- Recent interest in Rx Opioids e.g. Project Lazarus
  - Medicalizing and normalizing
- Key OD educational elements:
  - Prevention, Recognition, Intervention, Follow up
  - In person, some with video, online in development
    - NYC Dept of Health- short, broad population
    - Project Lazarus- pain patient oriented, longer
Q. What has research shown to be the impacts of distributing Naloxone to potential overdose bystanders?

- Naloxone administration has not resulted in dangerous health outcomes;
- Drug users are willing to administer naloxone to each other;
- Naloxone availability does not increase drug use;
- Evaluation data suggests that many who receive overdose education and take-home naloxone decrease their own risk for overdose by reducing drug use and/or entering drug treatment.

Cont.

- More than 10,000 opioid overdoses have been reversed with naloxone given by bystanders in the U.S.
  - Naloxone distribution programs generally provide overdose prevention and recognition training combined with the dispensing of take-home Naloxone (THN).
  - More than 100 programs that distribute naloxone to opioid users are operating in at least 15 states.
- As of 2012, two studies in the United States have recently received funding to conduct studies of overdose education and take-home naloxone distribution to populations at high risk for overdose.

Opioid overdose prevention with intranasal naloxone among people who take methadone.


Overdose education and naloxone distribution (OEND) is an intervention that addresses overdose, but has not been studied among people who take methadone, a drug involved in increasing numbers of overdoses. This study describes the implementation of OEND among people taking methadone in the previous 30 days in various settings in Massachusetts. From 2008 to 2010, 1553 participants received OEND who had taken methadone in the past 30 days. Settings included inpatient detoxification (47%), HIV prevention programs (25%), methadone maintenance treatment programs (MMTP) (17%), and other settings (11%). Previous overdose, recent inpatient detoxification and incarceration, and polysubstance use were overdose risks factors common among all groups. Participants reported 92 overdose rescues. OEND programs are public health interventions that address overdose risk among people who take methadone and their social networks. OEND programs can be implemented in MMTPs, detoxification programs, and HIV prevention programs.
Naloxone for Overdose Prevention

Patient name

Date of birth

Patient address

Patient city, state, ZIP code

Rx

Prescriber name

Prescriber address

Prescriber city, state, ZIP code

Prescriber phone number

Naloxone HCl 0.4 mg/mL (Narcan)
1 x 10 mL as one flip top vial (NDC 0409-1219-01) OR
2 x 1 mL single dose vials (NDC 0409-1215-01)

Refills: ______

Intramuscular (IM) syringe, 23 G, 3cc, 1 inch

Qty: ______ Refills: ______

Sig: For suspected opioid overdose, inject 1 mL IM in shoulder or thigh. Repeat after 3 minutes if no or minimal response.

Prescriber signature

Date

Are they breathing?

Signs of an overdose:
• Slow or shallow breathing
• Gasping for air when sleeping or weird snoring
• Pale or bluish skin
• Slow heartbeat, low blood pressure
• Won't wake up or respond (rub knuckles on sternum)

Call 911 for help

All you have to say:
“Someone is unresponsive and not breathing.”
Give clear address and location.

Airway

Make sure nothing is inside the person's mouth.

Rescue breathing

Oxygen saves lives. Breathe for them.
One hand on chin, tilt head back, pinch nose closed.
Make a seal over mouth & breathe in 1 breath every 5 seconds.
Chest should rise, not stomach

Evaluate

Are they any better? Can you get naloxone and prepare it quickly enough that they won't go for too long without your breathing assistance?

Prepare naloxone

• Remove cap from naloxone and uncover needle
• Insert needle through rubber plug, with bottle upside down
• Pull back on plunger and take up 1 cc into the syringe
• Don't worry about air bubbles (they aren't dangerous in muscle injections)

Muscular injection

Inject 1 cc of naloxone into a big muscle (shoulder or thigh)

Evaluate + support

• Continue rescue breathing
• Give another shot of naloxone in 3 minutes if no or minimal breathing or responsiveness
• Naloxone wears off in 30-90 minutes
• Comfort them, withdrawal can be unpleasant
• Get them medical care and help them not use more opiates right away
• Encourage survivors to seek treatment if they feel they have a problem

How to Avoid Overdose

• Only take medicine prescribed to you
• Don't take more than instructed
• Call a doctor if your pain gets worse
• Never mix pain meds with alcohol
• Avoid sleeping meds when taking pain meds
• Dispose of unused medications
• Store your medicine in a secure place
• Learn how to use naloxone
• Teach your family + friends how to respond to an overdose

For More Info
PrescribeToPrevent.com

Poison Center
1-800-222-1222 (free & anonymous)

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Evidence base

• We know naloxone works physiologically
  — Used by EMS and in OR's and ED's for decades
• Community based OD education and take-home naloxone shown to impact death rates at population level
• Evaluations of existing programs not had $ for rigorous research...

Fear of police/law
How to minimize

• Good Samaritan laws at State level can change practice OR perception
• Prosecutorial/Police policy at municipal level can be changed or made explicit [blessing or threat may catalyze]
• Police could be trained and allowed to administer naloxone e.g. Quincy, Mass
• I believe we have spread the word that no one should fear calling the police for assistance and that the option of life is just a 911 call away. We have also re-inforced with the community that the monster is not in the cruiser but indeed the officer represents a chance at life. Lt. Glynn

• PH/LE communication and coordination
  to discuss overdose as a public safety issue to change practice and in turn perceptions
• Training police and public essential
  — Transparency will help build trust

Naloxone - medical access

StopOverdose.org
Opioid overdoses can be prevented and reversed!

For Pharmacies and Prescribers

For patients and families:
How do I get naloxone?
If a patient is not available in your area, your pharmacy may need to order the medication.
1. Rub to wake.

- Rub your knuckles on the bony part of the chest (sternum) to try to get them to wake up and breathe.
2. Call 911.

All you need to say is:

- The address and where to find the person
- A person is not breathing
- When medics come, tell them what drugs the person took if you know
- Tell them if you gave naloxone

3. If the person stops breathing, give breaths mouth-to-mouth or use a disposable breathing mask.

- Put them on their back.
- Pull the chin forward to keep the airway open; put one hand on the chin, tilt the head back, and pinch the nose closed.
- Make a seal over their mouth with yours and breathe in two breaths. The chest, not the stomach, should rise.
- Give one breath every 5 seconds.

4. Give naloxone.

- For injectable naloxone: Inject into the arm or upper outer top of thigh muscle, 1 cc at a time. Always start from a new vial.
- For intranasal naloxone: Squirt half the vial into each nostril, pushing the applicator fast to make a fine mist.
- Discard any opened vials of naloxone within 6 hours

5. Stay with the person and keep them breathing.

- Continue giving mouth-to-mouth breathing if the person is not breathing on their own.
- Give a second dose of naloxone after 2-5 minutes if they do not wake up and breathe more than about 10-12 breaths a minute.
- Naloxone can spoil their high and they may want to use again. Remind them naloxone wears off soon and they could overdose again.

6. Place the person on their side.

- People can breathe in their own vomit and die. If the person is breathing, put them on their side. Pull the chin forward so they can breathe more easily. Some people may vomit once they get Naloxone; this position will help protect them from inhaling that vomit.

7. Convince the person to follow the paramedics' advice.

- If the paramedics advise them to go to the Emergency Room, health care staff will help:
  - Relieve symptoms of withdrawal
  - Prevent them from overdosing again today
  - By having an observer who can give more naloxone when the first dose wears off
  - Assess and treat the person for other drug overdoses. Naloxone only helps for opioids.
8. What if police show up?

- The Washington State 911 Good Samaritan Drug Overdose Law (RCW 69.50.315) lets bystanders give naloxone if they suspect an overdose.
- The law protects the victim and the helpers from prosecution for drug possession. The police can confiscate drugs and prosecute persons who have outstanding warrants from other crimes.