Opioids: The Good, The Bad, and The Ugly

Amy Nham, Katelyn Swafford, Liana So, Ana Barron
Pharm.D. Candidates
USC School of Pharmacy
Learning Objectives

1. Define narcotics and opioids
2. Describe common side effects of opioids
3. Explain the difference between tolerance, physical dependence, addiction, and pseudo-addiction
4. Identify symptoms of an opioid overdose and what to do in the event of one
5. Identify symptoms of opioid withdrawal
6. Be able to recognize the generic and brand name of opioids
7. Understand how “Scheduled” or “Controlled” medications are regulated
8. Understand the opioid epidemic and the dangers opioids possess
9. Be able to recognize red flags of abuse or addiction
10. Evaluate alternative non-opioid pain options
11. Analyze a prescription label
What are opioids?

- **Narcotic**: a drug that in moderate doses dulls the senses, relieves pain, and induces profound sleep, but in excessive doses causes near-unconsciousness, coma, or convulsions.

- **Opioid**: a type of narcotic medication that binds to opioid receptors.
What are side effects of opioids?

<table>
<thead>
<tr>
<th>Common Side Effects</th>
<th>Less Common Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Drowsiness</td>
<td>● Itching</td>
</tr>
<tr>
<td>● Dizziness</td>
<td>● Respiratory depression</td>
</tr>
<tr>
<td>● Constipation</td>
<td></td>
</tr>
<tr>
<td>● Nausea</td>
<td></td>
</tr>
<tr>
<td>● Vomiting</td>
<td></td>
</tr>
</tbody>
</table>

![Diagram showing the effects of opioids on various body systems](image-url)
What is tolerance, physical dependence, addiction, and pseudo-addiction?

**Dependence:** When a person physically needs a drug to function.

**Tolerance:** When you need to take more of a drug for the same effect.

**Withdrawal:** Symptoms experienced when a dependent person doesn't have the drug.

**Addiction:** When a person compulsively seeks out a drug despite negative consequences.

**Pseudo-addiction:** addiction-like behaviors exhibited by patients who are under-treated on their pain regimen
What is tolerance, physical dependence, addiction, and pseudo-addiction?
What does an opioid overdose look like?

SIGNS OF OVERDOSE

- Person is not moving
- Breathing will be slow or absent
- Person may be choking
- You can hear gurgling or snoring sounds
- Skin feels cold and clammy
- Pupils are tiny
- Lips and nails are blue
- Person can’t be woken up
What to do in case of an overdose?

If you suspect an opioid overdose:

1. CALL 911
2. LAY PERSON ON BACK
   - Support neck and tilt head back
3. GIVE NALOXONE
   - PEEL the package open and hold the device. Do not press until ready to give naloxone.
   - PLACE the tip in the nostril
   - PRESS firmly
4. PUT PERSON IN RECOVERY POSITION
   - Hand supports head
   - Knee stops body from rolling onto stomach
5. MONITOR
   - Give a second dose in 5 minutes if they don’t wake up or aren’t breathing properly.
   - Use a new spray every time.

Ask your pharmacist for naloxone.
What are symptoms of opioid withdrawal?

- Muscle aches
- Restlessness
- Anxiety
- Runny nose
- Teary eyes
- Excessive sweating
- Inability to sleep
- Yawning often
All opioids are “scheduled” or “controlled” by the DEA - What does this mean?

THE DRUG SCHEDULE CLASSIFICATIONS PYRAMID

**SCHEDULE 1**
Substances that have no currently accepted medical use in the United States, a lack of accepted safety for use under medical supervision, and a high potential for abuse.

**SCHEDULE 2**
Substances in this schedule have a high potential for abuse which may lead to severe psychological or physical dependence.

**SCHEDULE 3**
Substances in this schedule have a potential for abuse less than substances in Schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence.

**SCHEDULE 4**
Substances in this schedule have a low potential for abuse relative to substances in Schedule III.

**SCHEDULE 5**
Substances in this schedule have a low potential for abuse relative to substances listed in Schedule IV and consist primarily of preparations containing limited quantities of certain narcotics.
Examples of Scheduled/Controlled Medications

- **Schedule 1**: heroin, LSD, marijuana
- **Schedule 2**: morphine (MS Contin), hydromorphone (Dilaudid), fentanyl (Duragesic), oxycodone (OxyContin), oxycodone with acetaminophen (Percocet), hydrocodone with acetaminophen (Norco, Vicodin), methadone (Dolophine), tapentadol (Nucynta)
- **Schedule 3**: codeine with acetaminophen (Tylenol #2, 3, 4), buprenorphine (Suboxone)
- **Schedule 4**: tramadol (Ultram)
- **Schedule 5**: promethazine with codeine (Phenergan with codeine, Robitussin AC), pregabalin (Lyrica)
How are opioids regulated?

- Laws and regulations:
  - Prescription expires 6 months from the date written
  - Maximum of 90-day supply may be filled
  - Schedule 2 medications
    - Cannot be refilled
    - Must be filled in the state the prescription was written
  - Schedule 3-5 medications
    - May only be refilled 5 times with a maximum of 120 days worth of medication refills
    - First fill must be at the pharmacy it was originally dropped off or sent to
How are opioids regulated?

- Prescribing and filling
  - Prescribers
    - Controlled prescription pads
    - **Controlled Substance Utilization Review and Evaluation System (CURES)**
  - Pharmacists
    - Regulate how early the prescription may be filled (in general, pharmacies will fill 2 to 3 days early with the exception of travel)
    - CURES
Why do we still prescribe opioids?

**CHRONIC PAIN is a growing PUBLIC HEALTH PROBLEM:**

...more than one-third of people in the United States...

...and about 20 to 30% of the world's population.

Diseases that result in INCREASING prevalence of PERSISTENT PAIN:

- arthritis
- cancer
- cardiovascular disorders
- obesity
- diabetes
Why do we still prescribe opioids?

300% INCREASE in prescribing of opioids by clinicians in the past 20 years

Figure 2. Main reasons for last episode of prescription pain reliever misuse among past year misusers aged 18 or older: 2015

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relieve physical pain</td>
<td>63.4</td>
</tr>
<tr>
<td>Feel good or get high</td>
<td>11.7</td>
</tr>
<tr>
<td>Relax or relieve tension</td>
<td>10.9</td>
</tr>
<tr>
<td>Help with sleep</td>
<td>4.5</td>
</tr>
<tr>
<td>Help with feelings or emotions</td>
<td>3.2</td>
</tr>
<tr>
<td>“Hooked” and have to have it</td>
<td>2.5</td>
</tr>
<tr>
<td>Experiment or see what it is like</td>
<td>2.0</td>
</tr>
<tr>
<td>Increase or decrease effects of other drugs</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2015.
What is the opioid epidemic?

Every day, more than 115 people in the U.S. die after overdosing on opioids.

Opioid overdoses accounted for more than 42,000 deaths in 2016, more than any previous year on record.
What’s being done to combat this epidemic?

U.S. Department of Health and Human Services (HHS) is focusing its efforts on five major priorities:

1. improving access to treatment and recovery services
2. promoting use of overdose-reversing drugs (naloxone)
3. strengthening our understanding of the epidemic through better public health surveillance
4. providing support for cutting-edge research on pain and addiction
5. advancing better practices for pain management
What’s being done to combat this epidemic?
What are some red flags of drug abuse?

**Early Refills**
- Asking to refill controlled medication earlier than scheduled

**Doctor Shopping**
- Patient has seen many doctors in a short period of time

**Treatment Options**
- Patient isn’t willing to consider any other treatments

**Sharing Prescriptions**
- Using opioid prescriptions that are not prescribed for them

**Multiple Pharmacies**
- Patient uses multiple pharmacies
What are available resources?

- Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish)
  - 1-800-662-HELP (4357)
Activity Time!
Reading prescription labels
What should you ask yourself while evaluating patients’ prescriptions?

1. Does the medication belong to the patient?
2. When was it last filled?
3. Is the patient taking it as prescribed?
4. Is it expired?
5. Do they need refills?
6. Can they read the label?
7. Can they open the bottle?
8. Are they filling the prescription at more than one pharmacy?
9. Is the right medication in the correct bottle?
How do I read a prescription label?

- Pharmacy name and address
- Number used by the drugstore to identify this drug for your refills
- Person who gets this drug
- Instructions about how often and when to take this drug
- Name of drug and strength of drug
- Number of refills before certain date
- Doctor’s name
- Drugstore phone number
- Prescription fill date
- Don’t use this drug past this date

Example prescription label:

```
Local Pharmacy
123 MAIN STREET ANTYOWN, USA 11111
(800) 555-5555

JANE SMITH
456 MAIN STREET ANYTOWN, US 11111

NO 0060023-08291
DATE 06/23/09

DR. C. JONES

TAKE ONE CAPSULE BY MOUTH THREE TIMES DAILY FOR 10 DAYS UNTIL ALL TAKEN

AMOXICILLIN 500MG CAPSULES

NO REFILLS - DR. AUTHORIZATION REQUIRED

USE BEFORE 06/23/12

SLF/SLF
```
How do I read a prescription label?

1. **Clear refill details make re-ordering a snap**
   - TEL 555-555-5555
   - RX 105004
   - QTY: 60
   - REFILLS: 2 by MM/DD/YYYY
   - PRINKR: J. Doe
   - DATE FILLED: MM/DD/YYYY
   - DISCARD AFTER: MM/DD/YYYY
   - RPR: J. Smith
   - MFR: ABC Manufacturer

2. **Simplified dosage schedule for clearer directions**
   - **PATIENT**
   - **MEDICATION**
   - **500 MG TABLET**
   - **PERIODIC INSTRUCTIONS**
   - **1 TABLET**
   - **1 TABLET**
   - **1 TABLET**
   - **1 TABLET**
   - **Generic equivalent of: Glucophage**
   - **Take 1 tablet orally 2 times a day**

3. **Easy-to-find prescription information**
   - Important Information
     - Talk to your Dr. about the safe use of alcohol while taking this drug.
     - Severe vomiting or diarrhea may cause dehydration if these occur call MD.
     - Drug may cause lactic acidosis. If symptoms develop, seek medical help.

4. **Color-coded icons for times of day**
   - Morning
   - Midday
   - Evening
   - Bedtime

5. **Larger text for increased readability**
Let's practice!

OVAL WHITE TABLET
Side 1: IP 466

May Cause Drowsiness Or Dizziness

Take This Medicine With A Snack Or Small Meal If Stomach Upset Occurs

Read The Medication Guide That Comes With This Medicine

Increase Alcohol Use While Taking This Drug. Daily Use Of Alcohol May Increase The Risk Of Stomach Bleeding

MILEY CYRUS
5250 CHI MC LANE, BEVERLY HILLS 90210
DATE 02/23/14

VALTREX
MFG AMNEAL
TAKE 1 TABLET BY MOUTH EVERY 8 HOURS AS NEEDED FOR HERPE OUTBREAK CONTROL

RX 1836546-06293 EXPIRATION DATE 02/23/16
QTY 28 NO REFILLS - DR. AUTH REQUIRED
DR ANDRE YOUNG

Walgreens
5130 NUTCASE BLVD, BEVERLY HILLS 90210
(666) 265 - 0499

Rx ONLY
What else can be used for pain besides opioids?
What is the approach to pain management in the elderly?

Guidelines often used:

AGS
BEERS CRITERIA 2015
World Health Organization
What pain medications can be potentially inappropriate in elderly patients?

According to the AGS BEERs criteria:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Examples</th>
<th>Reason</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSAIDs</td>
<td>Ibuprofen, Naproxen</td>
<td>May ↑ risk of stomach bleed or ulcer, especially in pts &gt; 75yrs. May lead to ↑ BP with long-term use</td>
<td>Avoid long-term use, if possible</td>
</tr>
<tr>
<td>Aspirin &gt; 325mg/day</td>
<td>-----------</td>
<td>May ↑ risk of stomach bleed or ulcer, especially in pts &gt; 75yrs.</td>
<td>Avoid long-term use, if possible</td>
</tr>
<tr>
<td>Indomethacin</td>
<td>-----------</td>
<td>NSAID with most side effects. NSAID with most neurologic SEs</td>
<td>AVOID</td>
</tr>
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What pain medications can be potentially inappropriate in elderly patients?

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<tr>
<td>Skeletal Muscle Relaxants</td>
<td>Carisoprodol</td>
<td>Poorly tolerated in the elderly</td>
<td>AVOID</td>
</tr>
<tr>
<td></td>
<td>Chlorzoxazone</td>
<td>- Cause sedation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cyclobenzaprine</td>
<td>- ↑ risk of falls &amp; fractures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metaxalone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methocarbamol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orphenadrine</td>
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</tr>
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</table>
What about opioids?

AGS’s concerns with opioids in the elderly:

- Their potential adverse effects
  - Especially **constipation** since this is an issue a lot of older patients already struggle with and it doesn’t improve over time
- The risk of overdose and respiratory depression
- Drug-drug interactions (benzodiazepines, alcohol)
- The risk of drug accumulation
- The risk of addiction
What is the approach to pain management in the elderly?

**WHO three-step “Analgesic Ladder”**

**Step 1**
- Mild-Moderate Pain (1-3/10)
- Non-Drug or Non-opioid +/- Adjuvants

**Step 2**
- Moderate Pain (3-6/10)
- Non-Drug + Non-opioid +/- Adjuvants +/- weak opioid

**Step 3**
- Moderate to Severe Pain (7-10/10)
- Non-Drug + Non-opioid +/- Adjuvants +/- pure opioid

**Examples of Non-drugs:**
- Positioning
- Massage
- Ice pack for acute injury & pain
- Heat or cold for chronic pain
- Acupuncture/Acupressure
- PT/OT/Chiropractor
- Transcutaneous nerve stimulation (TNS)

**Examples of Non-opioids:**
- APAP
- NSAIDs

**Examples of weak opioids:**
- Codeine
- Hydrocodone
- Oxycodone + APAP combo

**Examples of pure opioids:**
- Morphine
- Hydromorphone
- Fentanyl
- Oxycodone

**Examples of Adjuvants:**
- Topical agents
- Antidepressant
- Anticonvulsants
What is the role of cannabis?

**Pros:**
- Adjunct pain relief
- Help with nausea → increase appetite
- Help with mental health disorders
- Help with sleep
- Different forms available

**Cons:**
- Federally Schedule 1
- Lack of extensive research
- Risk of tolerance
- Possible drug interactions
- Social stigma / cultural resistance
Summary:

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Thank you! Any questions?
References


