

# **Prescription Drug Abuse**

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# Outline

- **Sedative abuse**
- **Sleepers**
- **Stimulant abuse**
- **Oral pain reliever  
abuse**

# Teaching Points

- The ability to competently manage prescription drug abuse in clinical practice is rare
- Major issue – learning when to prescribe, what drug at what dose – and when not to, i.e., the management of substance abuse/addiction
- This lecture is focused on getting across the basics of management of: 1) sedative abuse, 2) use of sleeping medication, 3) stimulant abuse, and 4) oral pain reliever medication

# Pre-Lecture Exam

## Question 1

The mechanism of action of benzodiazepine:

- a. Inhibits Gaba A
- b. Potentiates Gaba A
- c. Inhibits SER
- d. Stimulates Alpha 1
- e. A and D

# Pre-Lecture Exam

## Question 2

Stimulant drugs can be effective for:

- a. ADHD
- b. ADD
- c. Schizophrenia
- d. Weight reduction
- e. Narcolepsy

# Pre-Lecture Exam

## Question 3

Physical dependence is:

- a. A normal response
- b. An abnormal response
- c. Does not cause tolerance
- d. Does not cause dependence
- e. Is all of the above

# Pre-Lecture Exam

## Question 4

Writing prescriptions for pain medication involves all but:

- a. Write like a check
- b. Specify pharmacy name
- c. Get to know pharmacist
- d. Usually no refills
- e. Avoiding contact with family

# Benzodiazepines

## High potency

short half life

alprazolam (Xanax)

lorazepam (Ativan)

triazolam (Halcion)

long half-life

clonazepam (Klonopin)



# Benzodiazepines

## Low potency

short half-life

oxazepam (serax)

temazepam (Restoril)

long half-life

chlordiazepoxide (Librium)

Chlorazepate (Tranxene)

diazepam (Valium)

flurazepam (Dalmane)

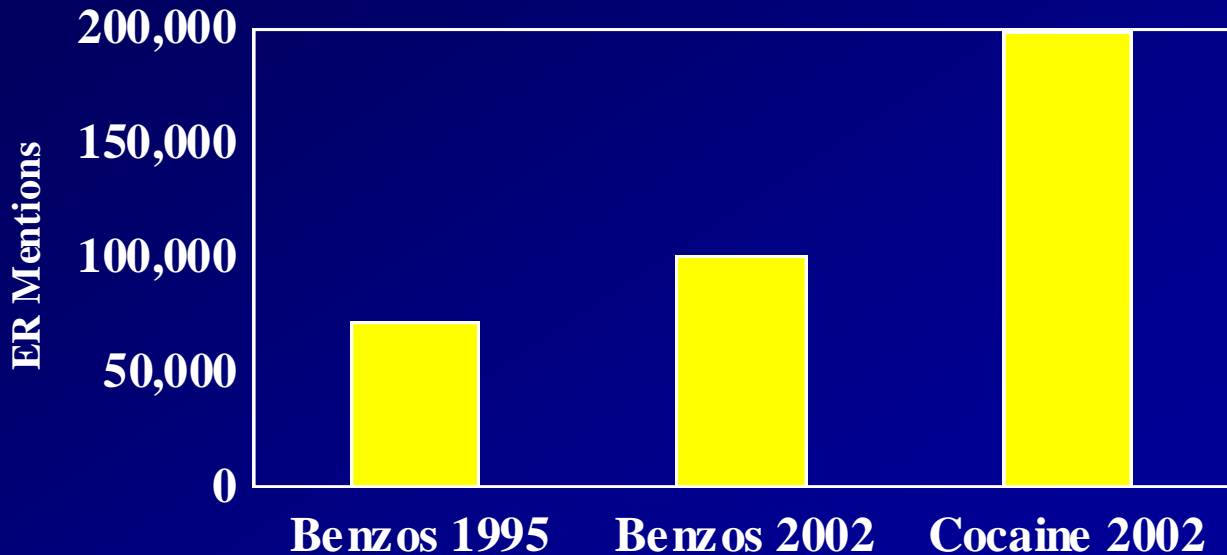
# Benzodiazepines

- **Mechanism of action**
  - Potentiate GABA A receptor activity
  - Similar mechanism of action
    - Barbiturates
    - Alcohol
  - Tolerance
  - Withdrawal

# BZ Withdrawal

- **Anxiety**
- **Agitation**
- **Increased sensitivity to lights, sound**
- **Paresthesias, strange sensations**
- **Muscle cramps**
- **Myoclonic jerks**
- **Insomnia**
- **Dizziness**
- **Seizures, delirium**

# ER Mentions of Benzodiazepines



# **Rationale Benzodiazepine Use**

- **Consider other alternatives**
- **Avoid benzos for drug abusers**
- **Avoid writing large scripts**
- **Avoid refills**
- **Avoid the most abusable**

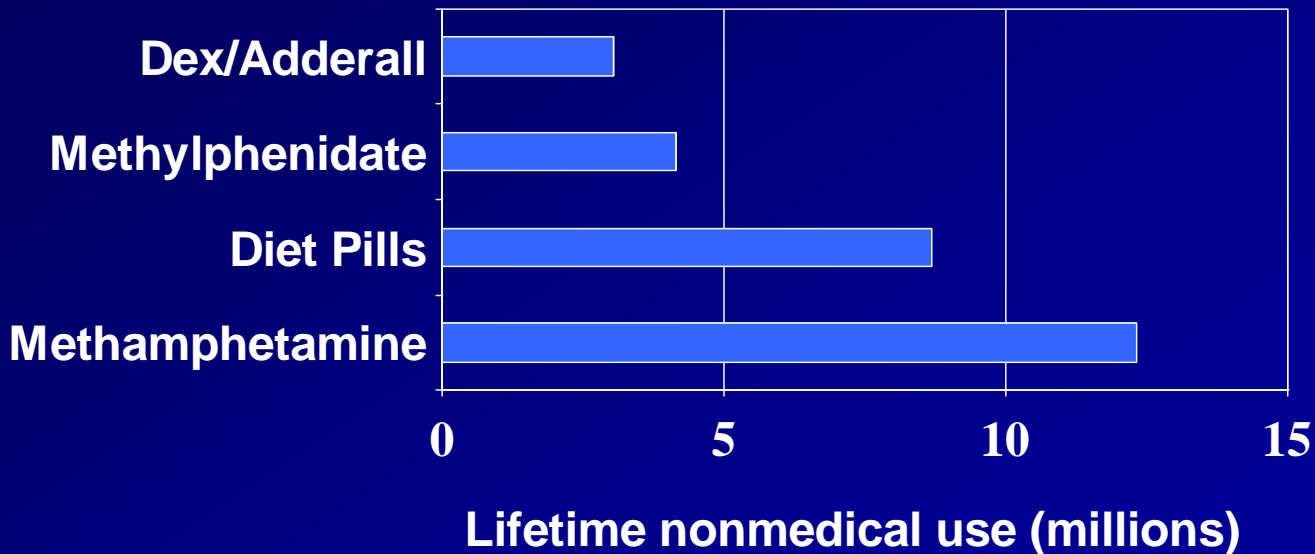
# Treating Insomnia

- Look for an underlying cause
- Start with sleep hygiene
- Medication options
  - Antihistamine
  - Non - benzodiazepine hypnotic
  - Sedating antidepressant
  - benzodiazepine

# Stimulant drugs

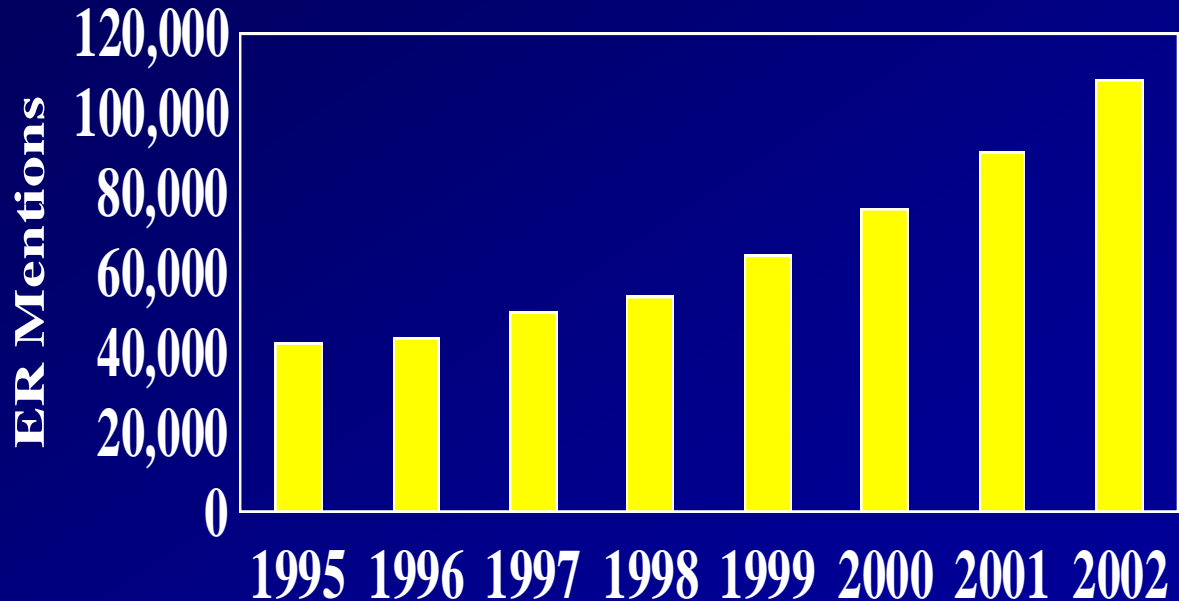
- **Amphetamines**
  - **Dextroamphetamine (Dexadrine)**
  - **Mixed (Adderall)**
- **Diet Pills - Phentermine et al.**
- **Methylphenidate (Ritalin)**

# Stimulant drug abuse

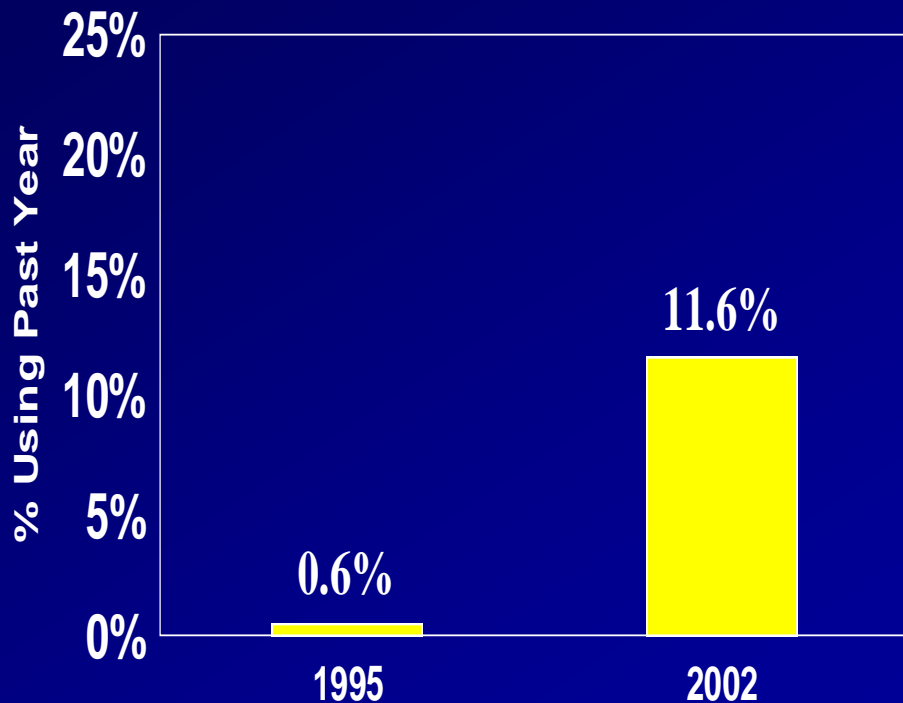




## Drug abuse related ED visits involving narcotic analgesics 1995-2002



# Use of prescription pain relievers ages 12-17



# **Favorite Narcotics**

- **Hydrocodone**
- **Oxycontin**
- **Combo meds are schedule III**
- **Oxycontin can be snorted or chewed**

# **Sources of Narcotics**

- **Deceived physicians**
- **Dishonest physicians**
- **Genuine pain patients**
- **Thefts or diversion from pharmacies**
- **Internet**

# The Availability of Opiates over the Internet

Robert F. Forman,  
Ph.D  
Treatment  
Research Institute  
University of  
Pennsylvania

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Fentanyl

Meperidine

Morphine

Nalbuphine

Remifentanil

Sufentanil

Alfenta

Astramorph

Buprenex

Demerol

Duramorph

Nubain

Stadol

Sublimaze

Sufenta

Ultiva

Alfenta

Demerol

Epimorph

Nubain

Stadol

Sufenta

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**WILL YOU NEED A PRESCRIPTION?**

This depends on a number of factors. There are sites that will refill prescriptions, and you should have no problem using those at all. However, there are some medications that will require a prescription. To fill this problem we have resources within our site that will connect you with a pharmacy or physician that can aid you in getting a prescription. Often is the case where you will deal with a physician over the phone for a evaluation. This can be a area of discouragement for many, as some just assume it is going to be challenging, in most all of our user feedback reports, we have found this to be the exact opposite. However, we would like to offer a word of caution. Research. It is imperative that you know and understand what the medications are that you order, and all the repercussions of the medications. If you have been previously prescribed a medication, and are merely looking for a way to get your medication at a cheaper and more convenient alternative, then you are a ideal candidate. However, if you are experimenting, we highly suggest you gather as much information as you can about whatever medication you are considering. There is a wealth of information within the private areas of the site that can help you in this area. And finally, if you are a recreational user, so be it, it is your personal right to do what you want in the privacy of your own home. Online-Drug-Source.com is here to provide a faster way for you to accomplish your goals, whatever your goals are, Online-Drug-Source.com can take no responsibility for the decisions you make.

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Second, as far as we know, we are the only site offering the "Fraud Watch" feature. This is one of our most valuable tools to you as a user. As we stated before, we do in fact spend a lot of time and money trying to keep the "Fraud Watch" system up to date, but by and far, it is the



# **Pain and Addiction**

- **Can the treatment of pain cause addiction?**
- **How is pain managed in the addicted?**

# **Inadequate treatment of cancer pain**

- **40-60% oncology patients--inadequate medication**
- **Minorities -3 times more likely**
- **Women**
- **Elderly**
- **Fears: respiratory depression, tolerance, addiction**
- **Confusion between “Dependence” and “Addiction”**

# **Physical Dependence (Normal response)**

- **Tolerance - reduced effect from level dose, may begin with 1st dose**
- **Withdrawal - Characteristic symptoms when drug abruptly stopped, may continue for days, weeks, months**

# Dependence (Addiction)

## DSM-IV

- Tolerance
- Withdrawal
- More use than intended
- Unsuccessful efforts to cut down
- Spends excessive time in acquisition
- Activities given up because of use
- Uses despite negative effects

# Pseudo-addiction

- Focus on obtaining opioids for pain relief
- Looks like addiction
  - manipulation,
  - doctor shopping,
  - multiple ED visits
- But it disappears with adequate meds

# **Pseudo-addiction**

## **Opioid Renewal Clinic at PVAMC**

- **170 consecutive chronic pain patients**
  - Referred by primary care providers
  - All identified with “aberrant behavior”
- **Followed in special clinic (ORC)**
  - Nurse practitioner, pharmacist
  - Clinical algorithms, treatment agreements
  - Close follow up and monitoring
- **58 patients (34%) behavior resolved**
- **22 patients (13%) addicted**

# **Chronic pain**

- **Headache (various types)**
- **Backache (various etiologies)**
- **Reflex sympathetic dystrophy**
- **Diabetic Neuropathy**
- **Fibromyalgia**
- **Tic douloureux**
- **Post-herpetic (Shingles)**
- **Ulcerative colitis**

# **Chronic Pain and Addiction**

- **Few trials conducted**
- **Some say addiction not increased**
- **Others show high rates drug abuse**
- **Often addiction precedes pain**



# **Multi-disciplinary treatment approach**

- **Diagnosis of pain etiology**
- **Psychological evaluation**
- **Multimodal treatment**

# **Non- opiate options**

- **Acetaminophen**
- **Ibuprophen**
- **Aspirin**
- **Combinations - caffeine adjuvant**
- **Tramadol (low opiate receptor activity)**
- **Carbamazepine, Gabapentin**
- **Anti-depressants (amitryptiline et al)**

# **Non medication strategies**

- **Biofeedback**
- **Hypnosis**
- **Group and individual psychotherapy**
- **Cognitive therapy**
- **Family therapy**
- **Exercise**
- **Acupuncture**
- **TENS and related stimulation**
- **Nerve blocks**

# **Patients with substance abuse history**

- **Substance abuse may be a risk factor**
- **Extra care is necessary**
- **Specialty trained clinician**
- **Signed contract**
- **Close monitoring**

# Careful with prescriptions

- One prescriber only
- Write like a check
- No pre-printed DEA no.
- Specify pharmacy name
- Get to know pharmacist
- Usually no refills
- Stay in touch with family

**kampman\_k@mail.trc.upenn.edu**

# Post-Lecture Exam

## Question 1

The mechanism of action of benzodiazepine:

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- b. Potentiates Gaba A
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- b. ADD
- c. Schizophrenia
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Writing prescriptions for pain medication involves all but:

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- b. Specify pharmacy name
- c. Get to know pharmacist
- d. Usually no refills
- e. Avoiding contact with family

# Answers to Pre and Post Lecture Exams

1. B
2. D
3. A
4. E