

The Prescription Drug Epidemic

What you can do to make a difference

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Acknowledgements

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Objectives

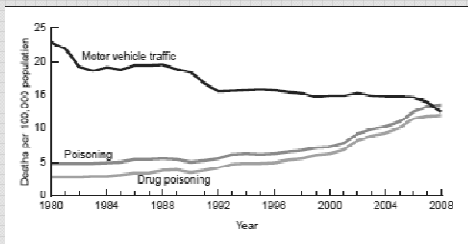
- Recognize the demographics of prescription drug abusers.
- Become familiar with the commonly abused medications.
- Be able to discuss prescription drug abuse in America and Idaho.
- Understand the effects of prescription drug abuse.
- Understand how pharmacists and technicians can make an impact on preventing prescription drug abuse.

Staggering Statistics

- 7 million Americans abuse prescription drugs. Only 3.8 million in 2000 = 80% increase
- This is more than the number who are abusing cocaine, heroin, hallucinogens, Ecstasy and inhalants combined!
- 2,500 youth abuse pain relievers for the first time each day
- Prescription drugs are the second most common drug abused by adolescents, second only to marijuana



Poisoning is now the leading cause of death from injuries in the U.S. and nearly 9 out of 10 poisoning deaths are caused by drugs



America's Growing Problem

- Populations seeing an increase in prescription drug abuse
 - Older adults
 - Women
 - Youth



The Elderly Prescription Drug Abuser

- Multiple medical problems
- Higher incidence of chronic pain
- Misunderstand directions: misuse vs. abuse
- Multiple prescribers
- Rationalization and denial among family members, peers or care providers
 - Deficits presumed to be due to age
- Interaction with alcohol or other drugs
- Over representation of females



Women and Prescription Drug Abuse

- 4 million women abuse prescription drugs
- Women account for 60% of ER visits for prescription drug abuse
- Painkillers killed 48,000 women from 1999-2010
- Every day, 18 women die of a prescription drug overdose in the U.S.
- Men are still more likely to die of overdose, but the number of deaths among women increased 5-fold in the last decade (CDC)



Youth and Prescription Drug Abuse

- Most youth use prescription drugs properly, but nearly 1 in 7 teens report abusing them to get high
- By their sophomore year in college, about half of all students have been offered the opportunity to abuse a prescription drug
- 69,236 adolescent ED visits associated with the abuse of prescription medications



Today's Youth

- 1 in 11 teens has used OTC cough medicines to get high.
- 1 in 5 teens use inhalants to get high
- 1 in 5 teens has reported using Vicodin
- 1 in 10 has reported using Oxycontin
- 1 in 5 teenagers report being offered a prescription painkiller to get high

Today's Youth

- Teen perception: Prescriptions are "safer" than illicit drugs
- The Partnership Attitude Tracking Study
 - 62% of youth reported access to "powerful painkillers" at home
 - 52% reported prescription meds are "available everywhere"
- It is surprisingly easy for teens to gain access to prescription drugs from their family's medicine cabinets, a friend's purse, and even a schoolmate's locker!

Trends In Drug Misuse

The most commonly abused medications:

- Pain relievers
- Stimulants
- Sedatives and tranquilizers
- Over the counter cough & cold medication

Crushing, snorting or injecting pills


Using together with alcohol, illicit drugs

- "pharm parties"



Commonly Abused OTCs

- Dextromethorphan
- Coricidin HBP
- Codeine + Guaifenesin
- Pseudoephedrine

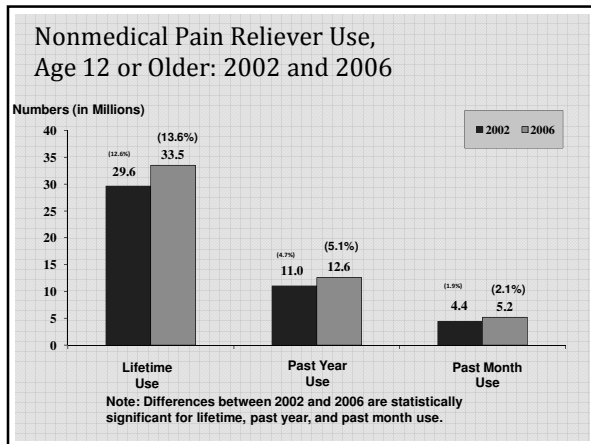


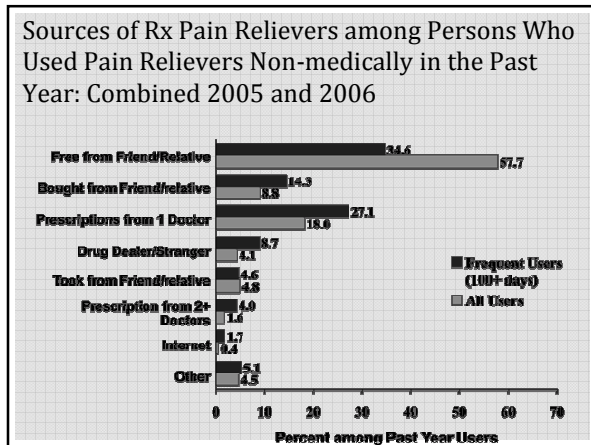
Commonly Abused Prescription Drugs

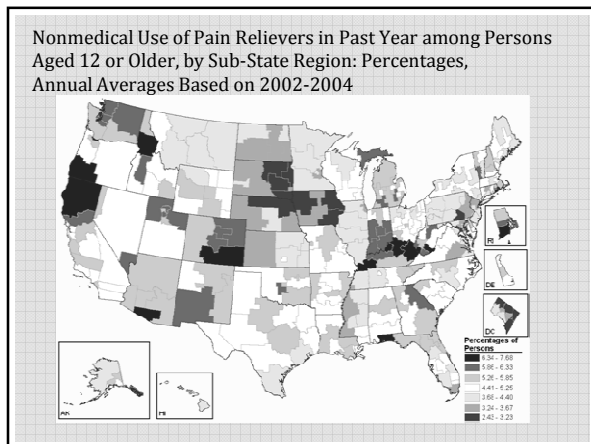
- PAIN RELIEVERS/OPIOIDS:
 - Hydrocodone (Norco, Vicodin, Lorcet)
 - Oxycodone (OxyContin, Percocet)
 - Morphine (MS Contin)
 - Fentanyl (Duragesic, Actiq)
 - Tramadol (Ultram), Carisoprodol (Soma)
- STIMULANTS:
 - Amphetamines (Adderall)
 - Methylphenidate (Ritalin)
- CNS DEPRESSANTS/SLEEP AIDS:
 - Benzodiazepines (Valium, Xanax, Klonopin, Ativan)
 - Zolpidem (Ambien), Eszopiclone (Lunesta)

Other Names for Prescription Drugs

<ul style="list-style-type: none"> • Amphetamines: Adderall™ Slangs: Crosstops, whites, speed, black beauties, bennies, pep pills, carwheels, addies • Dextroamphetamine: Dexedrine™ Slangs: Brown & Clears, Christmas Trees, Oranges, Diet Pills, Dex, Dexies, • Methamphetamine: Desoxyn ® (rarely prescribed) Slangs: Yaba (pills) 	<ul style="list-style-type: none"> • Amphetamines • Congeners • Methylphenidate: Ritalin®, Focalin®, Concerta®, Methylin®, Day Trana Patch®, MetadateCD®, • Slangs- Pellets, Vitamin R, JIF, MPH, R-ball, the smart drug, Skippy, West Coast • Lisdexamfetamine: • Vyvanse® • Fenfluramine: Pondimin® (Banned in the US) Slangs: Fen/phen, Hearts, Cis, Goofy, Lude, Bama, Peaches
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ED Visits and Prescription Drug Abuse

Benzodiazepines US

- Benzodiazepines are in the top 5 involved in drug-related deaths in 29/32 metro areas and 5/6 states
- Among suicides, benzodiazepines rank first 1/32 metro areas and among the top 5 in 19/32 metro areas and 2/6 states

Benzodiazepines Deaths

- About one-third have BZD in their toxicology reports
- About 12% have BZD cause of death
 - NH 20%
 - VT 13%
 - NC 2%
- Another 5% have "polydrug" cause with BZD toxicology

Drug Abuse Warning Network (DAWN) and Benzodiazepines

2004

- Benzodiazepines, such as alprazolam (34%) & clonazepam (18%) were each present in at least 100,000 ED visits involving non-medical use of pharmaceuticals: 29% of estimated visits
 - 23% alone- single drug
 - 77% poly drug
 - 30% as one of two drugs
 - 47% as one of three or more
 - 28% with alcohol
- Age structure:
 - 18% 12-20;
 - 36% 21-34;
 - 35% 35-54;
 - 10% 55+

2005

- Benzodiazepines = the most prevalent psychotherapeutic, alprazolam 36% & clonazepam 18%
- 29% of non-medical use of pharmaceuticals
- Increased 19% from '04 to '05

Stimulant Abuse

• Signs of Abuse

Nervousness, insomnia, over confident, aggressive, paranoid, loss of appetite, violent, euphoria, increased pulse rate & blood pressure

• Signs of an Overdose

Agitation, increased body temperature, hallucinations, convulsions, apathy, long periods of sleep, depression, disorientation & possible death

• Signs of Long-term Use

Heart disease, mental imbalances, paranoid, aggressive, twitching, malnutrition, dehydration & psychotic, & depression

Now You Know...

- Prescription drug abuse is on the rise in the U.S. as well as in Idaho
- Our youth are especially at risk for PDA due to ready availability of medications
- Commonly used prescription meds include pain relievers, sleep aids, stimulants, and OTC cough and cold medications

Origin of Prescription Drug Abuse

- The National Surveys on Drug Use and Health (NSDUH)
 - 2005 Inquiry: Source of non-medical psychotherapeutic meds for abuse
 - Findings: Most prevalent source is from a relative or friend for free
- Source of pain-relievers for non-medical use:
 - 59.8% report drug obtained from a friend or relative for free

Origin of Prescription Drug Abuse

- Increased street availability due to:
 - Doctor shopping
 - Sharing of prescription drugs between family and friends
 - Online pharmacies
 - "Pill mills"
 - Theft of pre-signed prescription pads

Origin of Prescription Drug Abuse

Results of The Partnership Attitude Tracking Study (PATS):
Teens in Grades 7 through 12, 2005:

- 56% agreed strongly or somewhat that prescription drugs are easier to get than illegal drugs.
- 40% agreed strongly or somewhat that prescription drugs, even if they are not prescribed by a doctor, are much safer than illegal drugs.
- 31% agreed strongly or somewhat that there is nothing wrong with using prescription drugs without a doctor's prescription once in a while.

The Dangers Of Prescription Drug Abuse Pharm Party!!



The Dangers Of Prescription Drug Abuse

- Prescription drug abuse is now the #2 cause of accidental death in the U.S. exceeded only by car accidents
- Unintentional drug overdose deaths increased 68% between 1999 and 2004.
- Opioid pain med poisonings increased 91% between 1999 and 2002.

How Can We Make A Difference

- Monitoring
 - Prescription Monitoring Program
 - Number of pills
 - Number of refills
 - Warning sign: early refills
- Medication storage
 - Encourage patient to store in a place only they know about
 - Pills are valuables just the same as cash or jewelry-- there is no shame in protecting medications
 - Locked boxes

How Can We Make A Difference

- Proper medication disposal
 - Expired/unused meds
 - Prevent retrieval
 - Do not flush
 - Remove any personal, identifying information
- Hand out fliers, handouts, and more information on ways to properly dispose of medications
 - <http://www.odp.idaho.gov/prevention/prescription.html>
 - Locations of Permanent Drug Take Back Programs

The Warning Signs Of Abuse

- You take more pain medication than your doctor has prescribed
- You request prescriptions from multiple doctors
- You use alcohol or other medications to increase the effects of the pain medication
- You take pain medication to deal with other problems, such as anxiety or stress
- Your doctor, friends or loved ones express concern about your use of pain medication

How You Can Make A Difference Summary

- Encourage patients to not take more than prescribed or share their medications with others
- Encourage the pharmacist to utilize the Prescription Monitoring Program if you suspect that a patient is abusing prescription medications
- Encourage proper drug disposal and storage to patients
- Know the warning signs of abuse
- As pharmacists and technicians we can make a difference by being the link to the community to answer questions. After all we are the drug experts!

Frequently Asked Questions

- **Why are certain substances addicting and others not?**
 - The reward center of the brain
 - Some prescription meds activate the addiction cycle, especially when used non-medically
 - From 1998 to 2008, admissions to drug addiction treatment centers for treatment of addiction to pain relievers rose 400x

Frequently Asked Questions

- **How should I store these types of medications?**
 - Many of those who abuse these types of medications (approximately 70%) get them from family or friends, often from the family medicine cabinet. Therefore, it is very important to store these medications in locked and secure areas, protected from those who may wish to abuse them.

Frequently Asked Questions

- ***How should I dispose of these types of medications when I no longer need them?***

- Unused medications may serve as a source of supply for those seeking to abuse them. Therefore, it is important that unused medications be disposed of properly. Some medications may be safely flushed down the toilet; others should be mixed with noxious materials (e.g. coffee grounds or kitty litter) and thrown into the trash.

Frequently Asked Questions

- ***What should I do if I or someone I know has a problem relating to the misuse or abuse of medications?***

- It is important to seek professional assistance when confronting any substance abuse problem. Speaking with a physician, nurse, or pharmacist can be a good start. Drug treatment facilities or counseling centers provide specially trained counselors.

Conclusion

- Prescription drug abuse is on the rise across the nation and in our own state
- There is an unmet need for education in Idaho regarding prescription drug abuse
- As pharmacists and technicians, we can make an impact by educating our patients
- For more information...

Where can I learn more?

National Council on Patient Information and Education: (www.talkaboutrx.org)

National Institute on Drug Abuse: (www.nida.nih.gov)

Office of National Drug Control Policy: (www.whitehousedrugpolicy.gov)

Partnership for a Drug-Free America: (www.drugfree.org)

Stop Medicine Abuse: (www.stopmedicineabuse.org)

Substance Abuse and Mental Health Services Administration: (www.samhsa.gov)

The Ohio State University College of Pharmacy Generation Rx Initiative:
(www.pharmacy.ohio-state.edu/outreach/generation-rx)

Idaho Office of Drug Policy:
<http://www.odp.idaho.gov/prevention/prescription.html>

References

1. United States. DEA. *DEA Fact Sheet: Prescription Drug Abuse – a DEA Focus*. 2010.
<http://www.iowa.gov/odcp/prescript_drug_use/TakeBackFactSheetFinal.pdf>.
2. "The Science of Drug Abuse and Addiction." *National Institute on Drug Abuse*. National Institutes of Health.
<<http://www.drugabuse.gov/>>.
3. "Prevention of Substance Abuse and Mental Illness." . Substance Abuse and Mental Health Services Administration, n.d. <<http://www.samhsa.gov/>>.
4. "1 in 5 teens misuse prescription drugs.." *Join Together*. N.p. July 2007.
<<http://www.jointogether.org/news/research/summaries/2006/1-in-5-teens-misuse.html>>.

References

5. McCabe, S.E., Teter, C.J., & Boyd, C.J. The use, misuse, and diversion of prescription stimulants among middle and high school students. 2004. *Substance Abuse & Misuse*, 93, 7, 1095-1116.
6. Joe Gfroerer Office of Applied Studies Substance Abuse and Mental Health Services Administration.
<www.fda.gov/ohrms/dockets/.../2008-4356s1-02-Guest-Gfroerer.ppt>.
7. Gunn, Joshua. "Prescription Drug Abuse and Trends In Postmortem Toxicology." 2010. Power Point presentation.
8. Warner M, Chen LH, Makuc DM, Anderson RN, Miniño AM. Drug poisoning deaths in the United States, 1980–2008. NCHS data brief, no 81. Hyattsville, MD: National Center for Health Statistics. 2011.
