Countries with population over 1,000,000

- Population: 1,000,000
- GDP per capita (PPP $): 28,500
- Infant mortality rate (per 1,000 live births): 11
- Literacy rate (%): 96
- Internet users (% of population): 82
- Internet penetration (per 100 people): 120
- Mobile phone subscriptions per 100 people: 140
- Mobile phone subscriptions per 100 people: 140
- Mobile phone subscriptions per 100 people: 140
Misuse and abuse

- Misuse – inappropriate use of medications sometimes caused by difficulties in taking meds as prescribed
- Unintentional misuse is common given many possible challenges (vision or hearing losses, keeping track of meds, etc.).
- Abuse - non-therapeutic and beyond intended purposes (Shibusawa, 2006).
Trends and Incidence

- Adults over 65 consume more prescribed and over-the-counter medications than any other age group in the United States (Blow, 2000; CSAT, 1998).
- Prescriptions filled by older adults represent approximately 30% of prescription expenditures (Hooyman & Kiyak, 2002) with many of these for mood altering medications.
What are the most commonly prescribed medications to older adults with potential for abuse?

- Benzodiazepines
- Antidepressants
- Opiate/opioid analgesics
Older women- are they more vulnerable?

- Shibusawa (2006) indicates that older adult women are more likely than older adult men to receive psychoactive drugs...
- Drug dependence is more common among older women than men.
How Common is Drug Abuse in the Elderly?

- A study in *Annals of Epidemiology* projected that the number of people age 50 and older abusing prescription drugs could increase 190% over the next two decades from 911,000 in 2001 to almost 2.7 million by 2020 (Johns Hopkins Medicine, 2010).

- According to the U.S. Substance Abuse and Mental Health Services Administration (2010) of 184,000 Americans who started treatment for any type of drug abuse in 2005, 10% were age 50 or older.
How Common is Drug Abuse in the Elderly?

- Nearly 20% of older persons are addicted to various substances (California Alcohol and Drug Program, 1998).
- Various Substances include alcohol and the use of prescription drugs.
- Medications of concern in older adults include those used to treat anxiety, depression, insomnia, and other mood disorders.
A discussion of the most commonly used illegal drugs by older adults

- Misuse of opiates, especially prescription pain medications, appears to be an important factor driving the increase in substance abuse by older adults. SAMHSA (1998) noted a significant increase in the percentage of older adults with opiates as their primary substance of abuse over an eight-year period.
A discussion of the most commonly used illegal drugs by older adults

- Krueger and Kruger (2000) report more than half a million people over the age of 55 in the US had used illicit drugs in the last month.

- Opiates, second only to alcohol, account for 14 percent of all drug treatment admissions over age 55. (Heroin is the drug of choice for nine out of 10 opioid abusers.)

- Older adults may be predisposed to illegal drug use because of past use and reinforcing factors, such as chronic or acute pain management.

- A recent report shows an increasing number of elderly people are using illicit drugs like cocaine, heroin, and marijuana.
Opioids

- Opioids can be taken orally, or the pills may be crushed and the powder snorted or injected. A number of overdose deaths have resulted from the latter routes of administration, particularly with the drug OxyContin, which was designed to be a slow-release formulation.
Opioids affect the brain by attaching to specific proteins called opioid receptors, found in the brain, spinal cord, and gastrointestinal tract. When these compounds attach to certain opioid receptors in the brain and spinal cord, they can effectively change the way a person experiences pain.

- In addition, opioid medications can affect regions of the brain that mediate what one perceives as pleasure, resulting in the initial euphoria or sense of well-being that many opioids produce. Repeated abuse of opioids can lead to addiction—a chronic, relapsing disease characterized by compulsive drug seeking and abuse despite its known harmful consequences.
Opiate Action in the Brain
How does addiction affect the body?

- Neuroanatomy and Physiology of the “Brain Reward System” in Substance Dependence
Risk Factors for Medication Misuse in the Elderly

- Multiple Physicians Prescribing Medicines
- Inappropriate Prescribing
- Failure to tell the doctor about over-the-counter medications, megadose vitamins, and herbals
- Problems taking medicine correctly because of alcohol use, depression, or self-neglect
Warning Signs of Issues Related to Alcohol or Other Drugs in the Elderly (CSAT, 2000)

- Memory trouble after having a drink or taking a medication
- Loss of coordination (walking unsteadily, frequent falls)
- Changes in sleeping habits
- Unexplained bruises
- Being unsure of yourself
- Irritability, sadness, depression
- Unexplained chronic pain
- Changes in eating habits
- Wanting to stay alone much of the time
- Failing to bathe or keep clean
- Having trouble concentrating
- Difficulty staying in touch with family or friends
- Lack of interest in usual activities
Prevention

- Screening for past or current substance abuse during routine examinations.
- Note any rapid increase in amount of medication needed or frequent requests for refills.
Brief Intervention (Rowan & Faul, 2007)

- If screening occurs in the Primary Care Provider’s office, then it is possible to decrease ER visits and costs.
- Steps suggested for effective screening and brief intervention:
  1. Provide a description of how the drug abuse affects the older adult’s health or functional status
  2. Concrete information is provided about how chemical abuse and dependency can be treated
Brief Intervention (continued)

- 3. If symptoms appear severe, recommending further assessment by a specialist is suggested.
- 4. If symptoms do not appear severe, having a discussion about monitoring progress over a few weeks and a willingness to make changes is appropriate.
- 5. If the situation is dire, with an apparent need for detoxification, admission to an inpatient facility may be the most prudent option.
Treatment Approaches

- Increased complexity when dealing with older adults and the challenges with the aging process and associated conditions calls for flexibility and a slower pace in discussing recommendations and planning.
- Twelve Step Programs can enhance quality of life for older adults.
- Cognitive Behavioral and Motivational Interviewing Approaches can assist with eliminating or decreasing substance abuse.
Selected References


