Substance and Medication Abuse/Misuse in Older Adults

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Substance and Medication Abuse/Misuse

- Prescription Medications
- Over the Counter Medications (OTC)
- Alcohol
- Illicit Drugs
- Any Combination of the Above
Aging of America...

Challenges of this growing population requires consideration of different, culturally appropriate responses...

- Meeting the needs of current older adults.
- Planning for the coming baby boomers.
Substance and Medication Abuse/Misuse

• It is estimated that the number of older adults in need of substance abuse treatment will increase from 1.7 million in 2001 to 4.4 million in 2020.

• This is due to a 50 percent increase in the number of older adults and a 70 percent increase in the rate of treatment need due to a higher abuse rate among older adults.

• Currently the over 50 group makes up 10% of those in substance abuse treatment, i.e., 1.8 million older adults - predominately for alcohol abuse.

“Substance abuse treatment need among older adults in 2020: the impact of the aging baby-boom cohort” - Joseph Gfroerer, Michael Penne, Michael Pemberton and Ralph Folsom
Substance and Medication Abuse/Misuse

• Of those in treatment over 65 (2005) – alcohol is predominately the drug of choice, but ages 50-64 have more extensive substance abuse treatment histories – foretelling ...

• The majority of problems in current older adults appear related to: prescription medications alone, alcohol in combination with prescription medications/OTC, or alcohol only.

• Older adults in increasing numbers are also addicted to illicit drugs – currently as high as 4.1% of the general population.¹

¹ 2007 National Survey on Drug Use & Health: National Findings SAMHSA
Substance Abuse and Misuse

Most common substances of abuse:

- Alcohol
- Benzodiazepines
- Over-the-counter sleep aide, cough syrups, etc.
- Opiates (Oxycontin, Oxycodone, Hydrocodone, Methadone, etc.)
- Marijuana
- Hallucinogens (LSD, Psilocybin, Ecstasy, Dextromethorphan)
- Heroin
- Cocaine/Crack
- Stimulants – methamphetamine
Older Adults and Illicit Drug Use

The National Survey on Drug Use and Health (NSDUH) defines illicit drugs as marijuana/hashish, cocaine, inhalants, hallucinogens, heroin, or prescription-type drugs used “non-medically”.

THE NSDUH Report is published by the Office of Applied Studies, Substance Abuse Mental Health Services Administration.
Older Adults and Illicit Drug Use

• Nonmedical use is defined as the use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives that were not prescribed for the respondent by a physician, or used for the experience or feeling they cause.

• Includes:
  – Opioid Analgesics, e.g. Darvon, Percocet, Oxycontin
  – CNS stimulants such as Ritalin
  – Minor tranquilizers such as Valium, Ativan
  – Sedative/ Hypnotics, e.g. Seconal, Amobarbital
Older Adults and Illicit Drug Use

- Current illicit drug use by older adults is the lowest rate of all age groups.
- Approximately half of baby boomers have tried illicit drugs.
- Birth cohorts that experience high rates of illicit drug use in earlier ages have shown higher rates of use as they age as compared to other cohorts!

Source: The NHSDA Report, Substance Use Among Older Adults; November 2001
Older Adults and Drug Abuse/Misuse

• Women over age 65 more likely to report non-medical use of prescription drugs; however, reports of marijuana use are increasing.

• Men aged 65 and older were equally likely to report marijuana use as well as nonmedical use of prescription drugs.
Older Adults and Drug Abuse/Misuse

• Of concern is the increasing rate of problem substance use in the “baby boomer” population related to the “nonmedical use” of prescription drugs.
  – Americans are 4.6% of the world’s population but consume 80% of the world’s opioid supply.
  – The highest percentage of deaths from overdoses of opioids from 2004 – 2007 are in the 45 – 54 age group.

“Substance abuse treatment need among older adults in 2020: the impact of the aging baby boom cohort.” Gfroerer, Penne, Pamberton and Folsom.
Older Adults and Drug Abuse/Misuse

- Therapeutic opioid use has increased substantially: yet effectiveness is demonstrated only for short term acute pain.
- There are multiple adverse consequences – hormonal and immune system effects, abuse and addiction, tolerance and hyperalgesia.
- Long-term use has shown to increase overall cost of healthcare, disability, rates of surgery and late opioid use.

Medication Abuse and Misuse
Medication Abuse and Misuse

Adults 65 and older consume more prescribed and over-the-counter medications than any other age group (13% of population but 25-30% of medications)- one of fastest growing health concerns.
Medication Abuse and Misuse (cont.)

- Adults 65 and older consume:
  - 25-30% of all medications.
  - 70% of all over-the-counter medications.

- Average adult over 65 uses 11 different prescriptions over one year.

- One out of four prescription medications taken by older adults is psychoactive.
50% of prescribed medications are not taken according to directions.

Older adults experience two to three times as many adverse drug reactions as do younger adults.

Over ½ of individuals who are hospitalized for adverse drug reactions are over age 65.

Special concern - prescription medications and alcohol!
Age-related changes affect how we process medications and alcohol:

- Lean body mass decreases
- Fat increases
- Total body water decreases
- Decrease in the stomach’s ability to metabolize alcohol
- Renal changes
- Decreases in liver function
- Neurotransmitter/brain-related changes
Older Adults and Medications

- 20% suffer from problems with medications or alcohol and may not know it.\(^1\)
- Likely to be prescribed more long-term prescriptions, as well as multiple prescriptions.
- Large percentage also use over-the-counter (OTC) medications, herbs and dietary supplements along with prescription medications.
- Also at risk for prescription drug abuse – intentionally take medications that are not medically necessary: “accidental addicts”.

Older Adults and Medications

- Over-use, under-use or irregular use of prescription or OTC drugs are forms of drug misuse.
- Experience more adverse health consequences with OTC and prescription drug misuse or abuse...
  - Complicated by high rates of co-morbid illnesses.
  - Potential for drug interaction.
  - Changes in drug metabolism with age (resulting in drug activity lasting longer).
- Particular medications of concern include:
  - Those for anxiety, depression, insomnia, other mood disorders.
    - 25% of older adults use psychotherapeutic drugs.
  - OTC and herbal supplements.
Risk Factors for Medication Misuse

• Taking extra doses, missing doses, not following instructions, taking the wrong medications.
• Using medications that have expired.
• Not knowing about side effects.
• Sharing or borrowing medications.
• Mixing medications or drinking alcohol while taking medications.
• Going to multiple physicians to get more of the same drug.
• Going to multiple physicians who are unaware of complete medications regiment.
Risk of Drug Misuse Among Older Persons Increases for Many Reasons:

- Inappropriate prescribing, especially for women.
- Failure to tell doctor about OTC, herbs, vitamins.
- Memory problems.
- Problems taking medications.
- Small print on packaging and labels.
- Health literacy issues, e.g., not understanding the physician’s instructions.
- Missing or misunderstanding instructions – vision, hearing and/or language barriers.
Medicines and Alcohol Interactions

• Even social drinking can be a problem for someone taking medications regularly.

• Examples of dangerous drug-alcohol interactions
  – Acetaminophen (such as Tylenol) may cause liver damage in people having three or more drinks a day.
  – Alcohol can worsen central nervous system depression in persons taking anti-depressants.
  – High does of sedatives mixed with alcohol can be lethal.

• Increased risk of gait disturbance and subsequent falls.
Ways to Avoid Medication Misuse: Health Literacy

- Improve doctor-patient communication.
- Encourage health care professionals to explain carefully how and when to take medications and what must be avoided, e.g. alcohol, OTC, etc.
- Encourage consumers to let doctors know all medications they are taking, e.g. OTC, herbs, supplements.
- Improve medication adherence by consumers.
- Address communication barriers, e.g. hearing loss, language.
- Provide consumers aids, e.g. medication tracking devices.
- Implement policy changes, e.g. geriatric-relevant labeling.
Alcohol
Myths about Alcohol Use/Abuse

• Feeling sad or depressed is part of growing old. There's nothing you can do to help the older adult.
• Over-the-counter medications and alcohol can be used together safely.
• Very few women become alcoholics.
• If an older adult says that drinking is his or her last remaining pleasure, it is generally best to allow the person to continue to drink.
Alcohol and Substance Abuse

Alcohol and substance abuse is less likely to be recognized in the older adult:

- Lack of adequate history
- Alcohol-related problems may be mistaken for medical or psychiatric problems
- Older individuals live alone
- No job-related difficulties
- Usually no legal problems
While the prevalence of alcohol/substance abuse problems in the general population is under 10%, it is estimated that the prevalence for older adults is much higher in healthcare settings.
Older Adults and Alcohol

Spectrum of Older Adult Drinking

- 60% Abstain
- 20% At Risk
- 18% Moderate Drinker
- 2% Alcohol Dependent
Older Adults and Alcohol Abuse

Definitions:

- At risk - drinking more than the recommended limits
- Problem drinking/abuse – 1 or 2 problems related to drinking
- Dependence – 3 or more problems related to drinking as defined by DSM IV R
Older Adults and Alcohol Abuse

Types:

• **At Risk** - a pattern of use with potential for adverse consequences
  • Individuals whose quantity/frequency have not changed, but experience problems due to age-related changes in alcohol metabolism, combining alcohol with medications

• **Early Onset** (Chronic) – alcohol abusers in adult years who have grown older without treatment
  • Higher incidence of psychiatric co-morbidity
  • Intermittent (Periodic)
  • Same as Early Onset
  • Periods (sometimes lengthy) of abstinence from substances
Older Adults and Alcohol Abuse

Types: (cont.)

• **Late Onset** – increased consumption of alcohol due to losses or stresses associated with age
  • Represents 1/3 of older adults with alcohol problems (SAMSA, 2005)
  • Sensitivity/tolerance to alcohol changes in older years
  • More rapid progression of addiction: < 1 year
  • Significant problem for older women
One Drink is Equal to the Following:

One 12-ounce can or bottle of regular beer, ale, or wine cooler

One 8- or 9-ounce can or bottle of malt liquor

One 5-ounce glass of red or white wine

One 1.5-ounce shot glass of hard liquor (spirits). The label will say 80 proof or less. Spirits include whiskey, gin, vodka, rum, and other hard liquors.
Drinking Guidelines for Older Adults

The Consensus Panel\(^1\) recommends the following usage guidelines for Older Adults:

Guidelines for Men

• No more than one drink per day (1)
• A maximum of two drinks on any drinking occasion (e.g., New Year's Eve, weddings).

Guidelines for Women

• Somewhat lower than for men

\(^1\) TIP 26: Substance Abuse Among Older Adults, Frederick C. Blow Consensus Panel Chair, SAMHSA, 1998.
Alcohol can trigger health problems or make them worse...

- Increased risk of high blood pressure, heart disease, stroke
- Impaired immune system
- Cirrhosis and other liver diseases
- Decreased bone density and chronic pain
- Internal bleeding and ulcers
- Depression, anxiety, amnesia, other MH problems
- Cancer of the stomach, larynx, pancreas, liver or esophagus
- Nutritional disorders & sleep disorders
- Overall increase in mortality

1 Widlitz & Marin 2002
Risk Factors for Alcohol Problems – Late Onset

- Death of a spouse, friends and other family members
- Separation from children and loss of home as a result of relocation
- Loss of job – and related income, social status and sometimes, self-esteem – as a result of retirement
- Loss of mobility – trouble using public transportation, inability to drive, etc.
- Impaired vision and hearing, insomnia and memory problems
- Family history of addiction
- History of depression, anxiety
- Declining health because of chronic illness
- Loss of social support and interesting activities
Protective Factors

- Access to resources, such as housing and health care
- Availability of support networks and social bonds
- Involvement in community activities
- Supportive family relationships
- Education (e.g. wise use of medications) and skills
- Sense of purpose and identity
Co-Occurring Disorders

- Physical, cognitive and behavioral issues are also more likely to be present in older adults.
- Co-occurring mental health disorders that often occur at the same time as alcohol or other substance use disorder:
  - Social phobia
  - Generalized Anxiety Disorders
  - Agoraphobia
  - Simple Phobia
  - Post Traumatic Stress Disorder
  - Panic Disorder
  - Major Depression
  - Schizophrenia
Summary...

• Substance use disorders are a serious problem for older adults and are:
  – Under-estimated
  – Under-identified
  – Under-diagnosed
  – Under-treated

• Often have co-morbidity – more at risk for physical and other behavioral health problems.

• Prescribed medications and OTC are a major factor in most cases of misuse, abuse and dependency.

• Alcohol is the primary drug of choice.
What Can We Do?

• Increase capability for effective screening and assessment.
• Develop age-appropriate interventions and treatment approaches for current older adults.
• **Look to approaches that integrate with physical health (e.g. primary care) as well as specialty care.**
• Plan for the increase in need for interventions and treatment protocols for aging baby boomers.
Great Opportunity for Prevention and Early Intervention

• Educational needs of physicians and other medical personnel.

• Look for those “teachable moments”:  
  – Healthcare/behavioral health care workers  
  – Aging professionals  
  – Consumers, family members, advocates  
  – “Natural” settings and outreach  
  – Normalization of the message  
  – INTEGRATED APPROACHES

• Screen for “risky behavior” in all settings.

• Advocate locally for screening programs for all older adults, e.g., senior fairs, senior housing.
Screening & Assessment
Screening Process

Screening needs to be holistic as the older adult is more likely to have a co-occurring physical, behavioral or cognitive impairment.
Screenings

When to Screen?

• At routine medical exams.
• If never before – recommended at age 60.
• During major life transitions, e.g. menopause, recent empty nest, approaching retirement, caretaker for sick relatives or young child.
• After life events, e.g. minor traffic accidents, loss of housing, decrease in ADL or driving abilities, inability to complete chores and paperwork without mistakes.
Who To Screen?
Signs and Symptoms

• Making excuses, hiding or denying drinking, getting annoyed when asked about drinking.
• Falls, blackouts or seizures.
• Bladder and bowel incontinence, urinary retention, difficulty urinating.
• Dry mouth, dehydration, malnutrition, muscle wasting, anorexia, changes in eating habits.
• Memory problems, confusing or disorientation, blurred vision, slurred speech.
Who To Screen?
Signs and Symptoms (Cont.)

• Drinking in spite of medical warnings.
• Arrests for drinking and driving, frequent car accidents.
• Frequent falls, unexplained bruising, tremor, lack of coordination, problems walking.
• Increased tolerance to alcohol or withdrawal symptoms if alcohol is removed.
• Morning drinking.
• Neglect of home, bills, pets, personal hygiene.
Who To Screen?
Signs and Symptoms (Cont.)

• Persistent irritability and altered mood, depression, anxiety symptoms.
• Problems with family and friends
• Withdrawal from social activities.
• Sleep problems, unusual fatigue, malaise.
• Suicidal thoughts or suicide attempts.
• Unusual restlessness, agitation and aggression
• Nausea, vomiting, heartburn, bloating indigestion.
Alcohol Screening Instruments

• AUDIT - Alcohol Use Identification Test

• CAGE - Cut down, Annoyed, Guilty, Eye Opener

• MAST-G - Michigan Alcoholism Screening Test – Geriatric Version

• ARPS/shARPS/CARPS – Computerized Alcohol-Related Problems Survey
AUDIT (Alcohol Use Disorders Identification Test)

- 10 question Interview or Self-Administered questionnaire
- Most often used in SBIRT efforts
- Designed for use in medical settings or other settings where the individual may present
- Screens for risky behavior related to alcohol use
CAGE Assessment (Alcohol Abuse)

• One of the most widely used alcohol screening tests
• Consists of four questions – one point each
• A score of two suggests a diagnosis of alcoholism
• Hinkin et al. (2001) modified for older adults – CAGE-AID; added questions about illicit drug abuse
• Recent study says you need to supplement amount and frequency questions for older adults
MAST-G

• The Michigan Alcoholism Screening Test Geriatric Version (MAST-G) is a well known alcohol screening instrument that has been validated for use with older adults.
• 24 questions – Yes/No response
• Score of 5 or more indicates alcohol problems.
**ARPS – Alcohol-Related Problems Survey**

- Self-administered questionnaire – 60 questions$^1$
  - Medical and psychiatric conditions
  - Symptoms of disease
  - Medication use
  - Physical function and health status
  - Quantity and frequency of alcohol use
  - Episodic heavy drinking
  - Symptoms of alcohol abuse and dependence
  - Drinking after driving

- shARPS & CARPS (includes ARCS Model of Learner Motivation)

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$^1$ Arlene Fink, et.al. 2002, Alison A. Moore, et.al. 2002
ARPS – Alcohol-Related Problems Survey

• Classifies drinking as
  – Non-hazardous – no known risk for physical or psychological health events
  – Hazardous – consumption with above risks
  – Harmful – results in adverse events

• The majority of ARPS “hazardous or harmful drinkers” did not screen positive on the CAGE, AUDIT or MAST

• Drinkers had medical conditions or used medications that placed them at higher risk
Attention - Did You Know?

– One to two drinks a day may be safe and for some people may prevent heart disease or stroke. BUT, for other people, 1–2 drinks may actually be dangerous. Why?
ARPS – Alcohol-Related Problems Survey

Relevance

• About Your Alcohol Use
  – You said you drink 3 drinks a day every day

• About Your Health
  – You said that you
    • have been diagnosed with hypertension
    • are on Coumadin at least once a week
    • are on 6 medications regularly
    • felt depressed most of the time in the past 4 weeks
What Does this Mean?

– Your alcohol use may be risky. Here is why:

– How much should I drink? Experts recommend that men 65 years of age and older consume 1 or less drink per day.

– Medicine and alcohol. Many medicines and alcohol interact. . . you reported that you are on Coumadin... you are taking 6 medications regularly.

– Depression and alcohol. Alcohol can sometimes make you feel even more depressed because. . .
Confidence and Satisfaction

What Should You Do?

– Here are some ways to drink less: Drink nonalcoholic wine or beer; put orange juice in champagne; don’t drink at lunch; don’t drink alone..., etc.

– Speak to your physician about ways to reduce the amount of alcohol you drink, the medications you are taking, your hypertension and other medical conditions, and your risk for depression.

Katherine Nguyen, BS, Arlene Fink, PhD, John C. Beck, MD, and Jerilyn Higa, MS Feasibility of Using an Alcohol-Screening and Health Education System With Older Primary Care Patients, JABFP January–February 2001 Vol. 14 No. 1, Page 10
Substance Abuse Screening Tools

• Drug Abuse Screening Test (DAST) - 20-question self-test. Does not include alcohol use.

• Drug Use Disorders Identification Test (DUDIT) 11 question self reporting

• Cut down, Annoyed, Guilty, Eye-opener – Adapted to Include Drugs (CAGE-AID)

• SSI-SA - Simple Screening Instrument for Substance Abuse
CAGE-AID

1. Have you ever felt you should cut down on your drinking or drug use?

2. Have people annoyed you by criticizing your drinking or drug use?

3. Have you ever felt bad or guilty about your drinking or drug use?

4. Have you ever had a drink or used drugs first thing in the morning (eye opener) to steady your nerves or to get rid of a hangover?

“0” for no and “1” for yes. A score of 1 or above accurately detects 91% of alcohol users and 92% of drug users. A score of 2 or greater is considered clinically significant.

Hinkin, 2001, Buschsbaum et. al., 1992; Booth, et. al., 1998
Summary

• Gather information and determine readiness for treatment
• Formal instruments administered by trained assessors, clinicians
• Need medical work-up
• Consider instruments developed for older adults and/or modify as necessary
• Contact your Single County Authority (SCA) for information [www.pacdaa.org](http://www.pacdaa.org) and click on “membership”
Treatment
Specialized Treatment for Older Adults

• Need extended detoxification and medical stabilization
• Need slower transitions between levels of care
• May have cognitive issues to consider
• Hearing, speech and vision impairments
• Need for longer rest, relaxation and recreation periods
• Nutrition issues
• Chronic pain may be a problem
• Grief and loss issues
• Social support/loneliness issues
Specialized Treatment for Older Adults (cont.)

- Current older adults are more compliant with treatment and have treatment outcomes (medical) as good or better than younger patients (Oslin, 1997, Atkinson, 1995) – particularly late onset drinkers.
- Baby Boomers – treatment programs will need to adapt.
- At this time there are no “rehabilitation units” specializing in older adult and addictions in PA and it is a challenge to find ambulatory care options specifically for older adults.
- Funding varies by insurance programs.
SBIRT Intervention and Treatment

• SBIRT – Screening, Brief Intervention, and Referral to Treatment – www.ireta.org

• Health and wellness focus

• Formal and brief process

• Used for prevention, risky behavior as well as to screen for serious problems

• Primary care centers, natural settings

• “Normalizes” message
SBIRT

• **Screening** – to identify those at risk

• **Brief Advice** - One-time intervention for short consult and informational literature (3-5 minutes)

• **Brief Intervention** - One or more short motivational sessions to encourage and promote healthy behaviors

• **Brief Treatment** - 1-6 sessions intervention, e.g., MET (Motivational Enhancement Therapy), CBT (Cognitive Behavioral Therapy), etc., provided by trained interventionists

• **Referral to Treatment** - for dependent users to receive specialized services and case management
Brief Advice & Brief Interventions

- Confidential setting
- Non-threatening, non-judgmental manner
- Prefacing questions with a link to a medical condition can make them more palatable

E.g. “I am wondering if alcohol may be the reason why your diabetes isn’t responding as it should?”
Interventions

• **Project GOAL** (Guiding Older Adult Lifestyles)

• Two ten to fifteen minute physician delivered counseling sessions scheduled one month apart.
  – Advice, education and contracting using a scripted workbook.
  – Follow-up phone call by nurse two weeks after each session.
• **Project GOAL:**
  – Older adults receiving the brief physician delivered intervention showed
    • 34% reduction in 7-Day alcohol use
    • 74% reduction in the mean numbers of binge-drinking episodes
    • 62% reduction in the percentage of older adults drinking more than 21 drinks per week, compared with a control group.
Prevention

Promising Practices

• **Project MEDS** (Medication Education Designed for Seniors) – peer delivered education program, Bucks County AAA (RSVP Station) 215-348-0510

• **Elder Health Program** – Consumer drug education program for older adults and their caregivers Elder Health Program, School of Pharmacy, Univ. of MD at Baltimore 410-706-3011

• **Senior Helping Hands** – an outreach program that addresses the needs of older adults with substance use disorders and mental illness. St. Cloud Hospital, St. Cloud MN 612-255-5732

• **Senior Sense Speaks** – An awareness program that trains seniors in safe medication practices and warns them of risk for alcohol abuse - [www.compdrug.org/seniorsense.htm](http://www.compdrug.org/seniorsense.htm)
Issues of Substance and Medication Abuse/Use in Older Adults: What Can We Do in Pennsylvania?
What Can We Do in Pennsylvania?

- Increase education/awareness efforts in the general population and professionals.
- Use approaches in prevention, intervention and treatment that involve natural systems/pathways for older adults, e.g. integrated with healthcare, other service avenues.
- Include older adults recovering from substance use disorders in all planning efforts.
- Include substance use disorders with mental health issues in preparing local planning models for addressing needs of older adults (County Memorandums of Understanding – MOU’s).
What Can We Do in Pennsylvania? (Cont.)

- Build workforce capacity to deal specifically with the needs of the older adult population.
- Create opportunities to bring evidenced-based approaches and promising practices to front-line workers.
- Come up with ways to finance/incentivize the development of models for prevention, education, and treatment regarding substance and medication abuse/misuse in older adults.
- Utilize an **Inter-professional approach**: remembering that care is interdependent, complementary and coordinated.
Resources

  www.samhsa.gov/Aging/docs/GettingConnectedToolkit.pdf

• Technical Assistance Older Americans Substance Abuse and Mental Health TAC -
  www.samhsa.gov/Olderadultstac/index.aspx

• National Institute of Alcohol Abuse and Alcoholism -
  http://www.niaaa.nih.gov

• IRETA (Institute for Research, Education and Training in Addictions) - www.ireta.org
Resources (cont.)

• Administration on Aging - www.aoa.gov/

• American Society on Aging—web based training
  www.asaging.org

• Brown University CAAS Distance Learning Program
  www.browndlp.org

• Aging To Perfection Program - Hanley Center, West Palm Beach, FL
  lguelzow@hanleycenter.org

• Florida BRITE – early intervention for older adults
  through all AAAs, Robert W. Hazlett, Ph.D., CAC, CCS,
  www.brite.fmhi.usf.edu/