

A Case

BW is a 93 year old WM living with his spouse of 71 years independently in a small apartment. His wife is blind and has significant functional limitations. She requires his assistance with activities of daily living. He no longer drives, but has three sons living nearby who help with errands such as grocery shopping and doctor appointments.

3

A Case

BW suffers from CHF, atrial fibrillation and osteoarthritis. He was recently diagnosed with depression. His current medications include:

- Furosemide 40 mg BID
- Potassium 20 mEq BID
- Digoxin 0.125 mg QD
- Warfarin 4 mg QD
- Sertraline 50 mg QD
- Acetaminophen 500 mg QID prn

4

A Case

Over the past several months, his warfarin therapy has been difficult to manage. His INR has fluctuated above and below the target range. He told his doctor that he wanted to stop taking all of these medications and was tired of the monitoring and dosing changes. His functional status has begun to decline and his family hired a companion service to assist him 3 mornings each week.

5

A Case

After working at the home for 2 weeks, the companion reported to the son that there were empty alcohol bottles in the trash. BW has a long history of episodes of alcohol misuse, but had been abstinent for almost 15 years after falling down the stairs and breaking his arm while intoxicated. The son had purchased a bottle of alcohol for his father recently because some friends were planning to visit.

6

A Case

BW then experienced 3 falls over 1 week's time and had significant lower extremity edema. After falling, he was unable to get up and his wife had to call EMS to assist him. After the third fall he was transported to the ER and was admitted for heart failure exacerbation.

7

A Case

The sons called a family meeting to discuss living arrangements for BW. They discover that each of them has been purchasing alcohol for their father over the past few months. Neighbors and grandchildren have also purchased alcohol for him. After some investigating it appears that he may have been drinking as much as 9 oz of bourbon daily.

8

Overview of the Issues

- The remarkable gains in extending the human lifespan seen in the 20th century are expected to continue into the 21st.
- In 2000, persons aged 65 and older numbered 40 million, or 13% of the U.S. population.
- The first wave of "baby boomers", those born between 1946 and 1964, will turn 65 in 2011.
- By 2030, 71 million will be over age 65.

9



Alcohol and medication use and misuse among older adults is one of the fastest growing health problems facing our country. Almost one in five older adults misuse alcohol and prescription drugs.

10

The Magnitude and Seriousness of the Problem

- Nearly $\frac{3}{4}$ of older adults experience increased drug dependency as they age
- 37% of older adults have a severe problem with alcohol or medications

SAMHSA, 2004.

SAMHSA, 2004

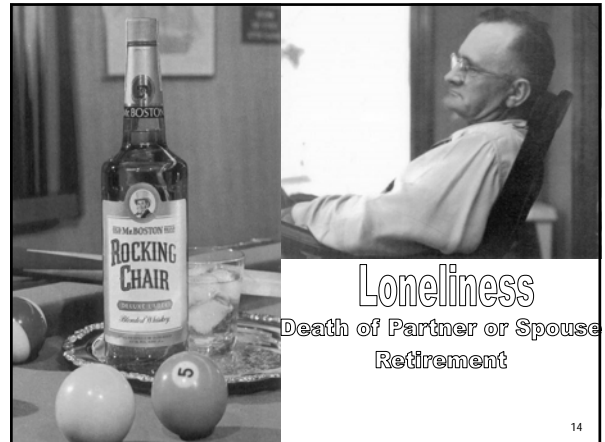
11

- Alcohol, the most abused substance in the U.S., is the drug of choice for older adults.
- Alcohol-related problems put more older Americans in the hospital than heart attacks.
- 1999 NIAAA report indicated 70% of older adult hospitalizations are due to alcohol-related problems.

12

Addiction experts estimate that 15% of Americans over age 65 will develop an alcohol problem when they retire or when their partner/spouse dies.

13



14



Widowers over age 75 have the highest rate of alcoholism in the country.

15

After age 65, drinkers are 16 times more likely to commit suicide.

16

No Older Adult is Immune

- Caucasian
- African American
- Hispanic
- Male
- Female
- Rich
- Poor

17

Who Becomes an Older Adult Alcoholic

- Early Onset
 - 2/3 of older alcoholics have been chronic abusers who have used alcohol heavily throughout their life.
- Late Onset
 - 1/3 of older alcoholics begin excessive drinking late in life – response to situational factors, life changing events.

18

Why are Older Adults at Risk to Abuse Substances and/or Medications?

- Bio
- Genetic
- Psychological
- Social

19

Other Risk Factors

- Functional Limitations
- Declining Health
- Depression
- Feeling Like a Burden to Others
- Low Self Esteem
- Physical Pain
- Changes in Living Situation

20

Other Risk Factors

- History of Substance Abuse
- Co-occurring Psychiatric Disorders
- Decreased Social Support
- Care Giving Role
- Isolation/Living Alone
- Living in a Health Care Setting

Blow, 2004

Blow, 2004

21

Signs & Symptoms of Alcohol Abuse in Older Adults

- Loss of interest in activities that used to bring enjoyment
- Change in sleep pattern
- Abrupt changes in mood
- A decline in:
 - *Grooming*
 - *Housekeeping & routine chores*
 - *Eating habits*

22

Signs & Symptoms of Alcohol Abuse in Older Adults (cont.):

- Unsteady gait
- Declining health
- Isolating from family
- Slurred speech
- Smell of alcohol on breath
- Memory loss or confusion (not dementia)

23

Signs & Symptoms of Alcohol Abuse in Older Adults (cont.):

- Trembling hands
- Smoke burns on clothing and furniture
- Increased use of medicine, tobacco, or alcohol
- Increased accidents

24

Changes in the Aging Body Which Increase the Effects of Alcohol

25

Changes in Body Composition

Older adults have higher body fat and less body water than younger adults.

Lower body water results in a smaller fluid volume for alcohol to distribute into.

Older adults get higher blood alcohol levels than younger adults after consuming the same amount of alcohol.

26

Changes in the Brain

Aging results in changes in the brain resulting in a decreased ability to compensate for the effects of alcohol.

Older adults are more susceptible to sedation and impairment when consuming alcohol.

Combining sedative medications with alcohol can result in excessive sedation, impaired motor skills and increased risk of injury.

27

Because of Changes in the Aging Body:

A 70 year old who drinks...



Is Equivalent to....

28

...a 21 year old who drinks...



...A Sobering Fact

29

Medication-Related Problems in Older Adults

“Any symptom in an elderly patient should be considered a drug side effect until proven otherwise.”

Gurwitz J, Monane M, Monane S, Avorn J. Brown University
Long-term Care Quarterly Letter 1995

30

Geriatric Syndromes

- Clinical conditions in older persons that do not fit into exact disease categories
- Geriatric syndromes include:
 - Delirium
 - Falls
 - Frailty
 - Dizziness
 - Syncope
 - Urinary incontinence



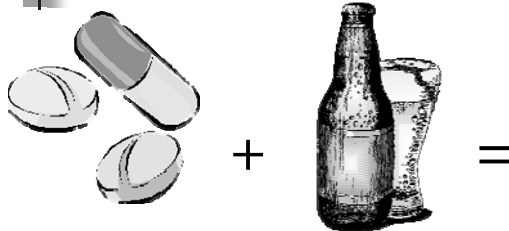
31

Geriatric Syndromes

- Highly prevalent, especially in frail older adults
- Substantially impact quality of life and disability
- Caused by multiple underlying factors
- Can be mistaken for normal aging
- May be caused or worsened by medications and alcohol

32

Mixing Alcohol with Drugs



...Potential Danger!

33

Alcohol-Medication Interactions

- 25% of community dwelling older adults at risk for alcohol-drug interactions
- 38% of older people in retirement communities were drinkers who used alcohol-interacting drugs
- 60% of older people referred for prescription drug abuse showed evidence of alcohol use
- 77% of older adult prescription drug users were exposed to alcohol-interacting drugs; 19% of those taking alcohol-interacting drugs reported concomitant alcohol use

34

Drug-Alcohol Interactions

- Enhanced central nervous system effects
 - Antidepressants --Muscle Relaxants
 - Antihistamines --Benzodiazepines
 - Sedative/hypnotics --Opioids
- Increased gastrointestinal toxicity
 - Nonsteroidal anti-inflammatory drugs
- Increased hypotension
 - Antihypertensive medications

35

Drug-Alcohol Interactions

- Acute alcohol effects
 - Alcohol inhibits drug metabolism resulting in higher drug exposure
 - Ex: warfarin

36

Drug-Alcohol Interactions

- **Chronic alcohol effects**
 - Alcohol induces drug metabolism resulting in lower drug exposure
 - Effect can last for several weeks after cessation of drinking
 - Ex: warfarin

37

Drug-Alcohol Interactions

- **Chronic alcohol effects:**
 - May transform some drugs into toxic chemicals
 - Ex: Increased liver toxicity from acetaminophen, methotrexate metabolites

38

Other Drug-Alcohol Interactions

- Tyramine (in some beers and wine) interacts with monoamine oxidase inhibitor antidepressants resulting in a dangerous rise in blood pressure.
- Medications that inhibit alcohol dehydrogenase (cefmandole, moxalactam, cefoperazone, chlorpropamide, tolbutamide, nitrates) can cause facial flushing, nausea and vomiting (disulfiram reaction) when mixed with alcohol.

39

Why are older adults at increased risk?

- **Physiologic changes with aging**
 - Decreased total body water
 - Decreased metabolism by liver
 - Decreased renal elimination
 - Decreased baseline performance
- **Multiple medications**
- **Uncoordinated care**
- **Adverse events mistaken for normal aging**
- **Shortage of professionals with specific training to work with older adults**

40

Adverse Consequences for Older Adults

- **Adverse Drug Events**
- **Falls**
- **Automobile accidents**
- **Death**

41

Case Study

During his hospitalization, BW abstained from alcohol and his medications were adjusted. After returning home, his CHF symptoms and mood improved. His gait, balance and functional status improved. His family support and companion services were expanded to assist with medication adherence and to monitor for alcohol use.

42

Responsible Drinking:

The *National Institute on Alcohol Abuse and Alcoholism (NIAAA) Drinking Guidelines for Older Adults (over 65 y/o) recommends:*

- **No more than 7 drinks per week (one drink per day)**
- **Maximum of 2 drinks on special occasions**
- **Somewhat lower limits for women**

43

Myths and Realities about Older Adults and Alcohol

- **MYTH:** My father has been drinking all his life. He's too old to change.
- **MYTH:** Drinking is the only pleasure mom has left. Why deprive her of the one thing that makes her happy?
- **REALITY:** You are never too old to change. The older adult has the best recovery rate from addictions of any age group.
- **REALITY:** Alcohol is a depressant. Alcohol abusers feel guilty, ashamed and depressed, not happy.

44

Myths and Realities (cont.)

- **MYTH:** My Uncle Harry says he drinks to relieve the pain.
- **MYTH:** I'm only a neighbor. I'm sure his family would do something if it were that bad.
- **REALITY:** When the alcohol wears off, the physical problem may still exist and needed medical attention may not be obtained for physical ailments.
- **REALITY:** His family may not even know about the problem, especially if they live far away.

45

There is still a "window of opportunity" for education about the risks of alcohol and prescription misuse before the swelling numbers of baby boomers face such issues.

46

The Best Is Yet to Come: Wellness for the Older Adult

- Think positively
- Stay active (Volunteer)
- Exercise your body
- Participate in Community Based programs
- Read warning labels
- Don't mix alcohol and medications

47

Take Action!

If you are an adult child, friend or caregiver of an older adult who is in need of assistance:

- Face the problem
- Be direct with the individual
- Be supportive without enabling
- Offer encouragement and praise
- Guide them to seek help from community resources

48

