Substance Abuse and the Older Adult

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Substance Abuse and The Older Adult

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- Instrumental Activities of Daily Living (IADL) Scale
- Geriatric Depression Scale (GDS) Short Form
- Center for Epidemiologic Studies – Depression Scale (CES-D)
- Health Screening Survey (HSS), Revised
Substance Abuse and the Older Adult

When you think of a substance abuser or misuser, what do you think of? Someone that is homeless, wears a trench coat and is holding a brown paper bag. Maybe a rebelling teenager? How about someone that looks like your neighbor, your Dad, your Uncle Joe or Granny Sue?

Rise of the Baby Boomer; their potential problems with alcohol, prescription medications and illicit drugs

The era of the “baby boomer” is coming of age and with that, they are bringing an increase in substance abuse or misuse. Alcohol and drug misuse affects around 17% of older adults and is becoming one of the fastest growing problems facing the country. Even as the numbers climb, the problem “remains underestimated, under identified, underdiagnosed and undertreated”. (SAMHSA, 2012)

Older Adults, 60 and older, are possible one of the most overlooked population and one of the most susceptible to alcohol and substance abuse in the country. They “consume more prescribed and over-the-counter medications than any other age group” and “in the United States, it is estimated that 2.5 million older adults have problems with alcohol”. (SAMHSA, 2012)

As a person ages, their body metabolizes alcohol differently than when they were younger, meaning that a drink at a younger age may not have caused any type of effect at all on the drinker but now that they are older if will bring on a bigger result. Alcohol causes diseases such as “HTN, diabetes, liver disease, memory loss and ulcers to worsen” (Fitzsimmons, 2010). Heavy drinking can cause cirrhosis, cancer or brain damage as well as other diseases. Interaction with certain medications also can be dangerous, causing over sedation, decreased reactions, impaired coordination that results in falls with or without injury, and possible death. Illnesses
such as depression, anxiety, and grief can mask signs of misuse. The increase of baby boomers coming of age will present more problems for healthcare workers, who do not appear to be properly trained. Education and screening are important factors in achieving proper and adequate treatment for the older adult.

**Vulnerabilities of the older adult**

As early as the age of 50, is when you will begin to see age-related changes that affect the body’s reactions to alcohol and other drugs. However, these changes vary from person to person or even within one person between body system to body system and can begin at any age.

“Drinking can be medically hazardous even if the frequency and amount consumed don’t warrant a diagnosis of abuse or dependency”. (SAMHSA, 2012) It is important that healthcare providers “view older drinkers and drug takers on a spectrum and to resist placing them into rigid categories for purpose of assessment and treatment”. (SAMHSA, 2012) Categories for this age group should include at-risk group, problem and dependent alcohol patterns. They should include their responses to experiences with substance use.

Other complicating factors include undiagnosed psychiatric and medical comorbidities. According Koenig and Blazer, “30% of older alcohol abusers have a primary mood disorder”. It is essential that a thorough evaluation be done as failure to this will “increase the number of false diagnoses and diminish the quality of older patients’ lives” (Gomberg, 1992)
SUBSTANCE ABUSE AND THE OLDER ADULT

Barriers to addressing misuse among the older adult

Ageism

Physical and mental health issues make diagnosis and treatment of the elder substance abuse more complicated. Barriers that affect treatment include: ageism, lack of awareness, clinical behavior, comorbidity.

According to the Merriam-Webster dictionary, the definition of ageism is prejudice or discrimination against a particular age group and especially the elderly. “In American culture, ageism reflects a personal revulsion about growing old, comprising in part fear of powerlessness, uselessness, and death”. (SAMHSA, 2012)

Aging may result in older adults being labeled as senile when in truth they may be afflicted by something that could be treatable such as Alzheimer’s disease, depression, multi-infarct dementia or alcoholism.

When a younger adult with an additional diagnosis of an illness such as depression, they are more likely to be given a correct diagnosis of substance abuse and if they have a diagnosis of hypertension they would be examined to find the underlining cause including substance abuse. However, an older adult with the same is treated for the present problem that they are seeking care for. The older adults are less likely to have a substance abuse identified during a routine exam and if diagnosed with an abuse problem they are not as likely to have a treatment recommended.

Some care providers may deem the older adult with a substance problem as being not worthy of treatment or changing behavior as they will more than likely die soon.
Lack of Awareness

Lack of awareness is shared by the abuser, their loved ones, the community, and society as a whole. “Stigma, shame or denial associated with abuse may be related to generation, religion, gender, culture, or a combination of these factor.” (SAMHSA, 2012) If they associate their alcohol problems to a breakdown in morals, the older adult is not likely to seek treatment for their problem. Some feel that social drinking is an acceptable behavior and that drinking is thought to be a pleasure they have earned and lacking responsibilities of work and family and should be allowed to enjoy themselves.

The older adult is more willing to accept a medical diagnosis than a mental one as they may interpret this as weakness, irresponsibility, or craziness. Many do not accept that alcohol or drug related disorders are healthcare problems or disorders. Many may think that some problems are related to old age or may be reluctant to complain too much. (Weiss, 1994)

Professional

Healthcare providers are as slow to spot a substance abuse problem as anyone else, even with a suspicion of abuse it may be hard to diagnose due to a wide variety of nonspecific symptoms. They are often in a quandary with symptoms such as fatigue, irritability insomnia, chronic pain, impotence as well as common medical and mental disorders or a combination of them. They are also less likely to detect alcohol problems in women, the educated and those with higher socioeconomic status. Keeler and colleagues found the amount of time spent at an office visit decreases as their age increases, obviously this isn’t due to them having fewer complaints. Short or abbreviated visits are insufficient to identifying an underlying problem of abuse. (Keeler, 1982)
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During the shortened visit a number of things may need to be discussed such as need for medication refill, current illness or complaints, recent changes that may have occurred such as major illness, hospitalization, retirement, death of a loved one, leaving questions or concerns of abuse left at the bottom of the list if even thought of or considered at all.

Some providers believe older adults don’t benefit from treatment, however, some research has shown that they have better outcomes than their younger counterparts and are likely to complete treatment.

Comorbidity

Another challenge to treatment is medical and psychiatric comorbidities such as medical complications, cognitive impairment, major depression, sensory deficits or lack of mobility. They cannot just complicate the diagnosis but also sway the provider from encouraging the patient to get proper treatment. An example would be someone who can’t walk well, not able to go up or down stairs, can’t drive or have trouble driving after dark or aren’t encouraged to go to meetings. Someone may be screened out due to poor cognitive testing or because the provider doesn’t think they will benefit.

Treatment facilities may be reluctant to treat them or may not have the means to accommodate their special needs. In-patient hospitals usually have staff trained to treat the older adult diagnosis, but out-patient programs might not, they might not accept “medicated older adults with mental disorders”.

Special Population

Women, minorities, and homebound may have more specific barriers to treatment then others in this group.
SUBSTANCE ABUSE AND THE OLDER ADULT

One of the issues is that most of the research in substance abuse mainly study males. More older women are living alone, and their abuse can be difficult to identify, and they are able to hide their drinking and or drug use more so because of the stigma associated is higher than in men. Other obstacles that they face is less insurance coverage and supplemental income, such as pensions. They are less likely to work, more likely to lose coverage due to the loss of spouse and or more likely to live in poverty. They drink less in public and are less likely to drive while under the influence of have other behaviors that could reveal a substance abuse problem, they are more likely to drink alone. Many older women didn’t learn to drive, are more likely to live at home alone. Overall, they are healthier, more independent but also more likely to be isolated. They are prescribed and take more psychoactive drugs, especially benzodiazepines then men and are more likely to be long term users.

Minorities

Little research has been done on minorities, but it has been noted that

- some groups may be more vulnerable to late life drinking,
- in urban areas, health care is delivered in busy out-patient department and or the ER, likely these issues will be overlooked
- Language - may need an interpreter or family member to translate – which they can bias the communication
- Ethnical or cultural background – the provider needs to know some of their belief systems in order to effectively do an interview or interpret the response.

Homebound

Older adults are often restricted to their homes by health problems such as heart disease, diabetes, chronic lung disease and conditions that limit their ADLs (Activities of Daily Living), bound by physical disabilities, are at higher risk of alcoholism, while weakness and frailty conditions limit mobility and transportation options.
SUBSTANCE ABUSE AND THE OLDER ADULT

According to Health Care Financing Administration and the Centers for Medicare and Medicaid Services, the definition of homebound is “the condition of the patient should be that there exists a normal inability to leave home and leaving home would require a considerable and taxing effort.” (Chen, 2007)

Dependency can be embarrassing and depressing leading to abuse. More often isolated socially having limited contact with other’s lack of a social support system makes them susceptible to depression and despair causing an increased risk of abuse.

*Other Barriers*

Even though transportation may be available to go to the Dr.’s office or the hospital during the day time hours but it may not be available at night time for out-patient abuse treatment programs such as Alcoholics Anonymous. Living in rural or poor urban communities may have a lack of transportation or access can be dangerous.

Shrinking social support network where they have fewer friends or family available to take to programs, treatment, or appointments.

They may say they don’t have the time especially if they provide care for a loved one or must babysit a grandchild.

Some programs have lack of experience in the older adult, or in accommodating disabilities such as hearing loss, impaired mobility, handicap accessibility.

Some insurance coverage may have limitations, restrictions on covering treatment programs.
Alcohol

“In 1990, those over 65 comprised 13% of the United States population, by 2030, they will account for 21%.” (Census, 1996) This increase has serious implications in the number of alcohol related problems occur and the costs that is involved in treating them.

Effects of alcohol on the older adult

Adults aged 65 years or older will more than likely be affected by one or more chronic illnesses. Many of these illnesses can make the older adult vulnerable to the negative effects of drinking.

There are three age related changes that affects the way older adults respond to drinking; decrease in body water, an increase in sensitivity and a decrease in tolerance, and a decrease in metabolism in the GI tract.

Lean body mass tends to decrease with age, total body water will also decrease while body fat increases. The decrease of body water means that the blood alcohol concentration is higher in an older adult than a younger one. The same amount that was consumed before had little to no effect, but it may now cause intoxication.

A natural aging decrease in the gastric alcohol dehydrogenase enzyme is another factor that worsens problems with drinking. The enzymes key role is in metabolizing alcohol in the GI mucosa, with decrease levels alcohol is metabolized slower meaning the alcohol stays in your system longer, this decrease activity also places and increase strain on the liver.
Consuming alcohol when older can cause or worsen certain ailments that may already be an issue or of concern for the older adult. Some of these may include an increased risk of hypertension, arrhythmias, heart attack and cardiomyopathy (enlarged heart), an increase risk of having a hemorrhagic stroke, impaired capability of fighting infections or cancer, decrease immune system, Cirrhosis of the liver and other liver diseases, decrease bone density, GI bleeds, Depression, anxiety and malnutrition. Cognitive impairments may worsen – increased confusion, forgetfulness. Chronic use can cause nonreversible changes in the brain and its function; alcohol-related dementia (ARD) may develop as well as other illnesses such as Alzheimer’s Disease or Wernicke-Korsakoff syndrome. Alcohol can also affect sleep patterns.

There have been some positive effects of alcohol reported also. Alcohol in lesser amounts has been proven to show some health benefits. Some studies have shown that in males, small amounts of alcohol consumption (one regular drink per day or less) may reduce the risk of coronary artery disease. (Shaper, Wannamethee, & and Walker, 1988) In women, moderate consumption may help improve HDL levels. However more research still needs to be done on these topics.

Small amounts of consumption also seem to help promote socialization suggesting it plays a role in the older adult’s community life.

Abstinence, though, is still recommended, especially for those with drug and alcohol issues, certain health issues and when taking certain medications.

There are two models used when classifying and understanding alcohol problems; medical diagnostic model and at-risk, heavy and problem drinking.
SUBSTANCE ABUSE AND THE OLDER ADULT

The medical model used by many clinicians defined in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*. They rely on it to help classify signs and symptoms of alcohol-related problems. It uses certain criteria to distinguish between those who abuse and those who are dependent on alcohol.

<table>
<thead>
<tr>
<th>DSM-IV Diagnostic Criteria for Substance Abuse</th>
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| The DSM-IV defines the diagnostic criteria for substance abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one or more of the following, occurring within a 12-month period.  
1. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use, substance-related absences, suspensions, or expulsions from school; neglect of children or household)  
2. Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)  
3. Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct).  
4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)  
Source: (Association, 1994) |

<table>
<thead>
<tr>
<th>DSM-IV Diagnostic Criteria for Substance Dependence</th>
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| The DSM-IV defines the diagnostic criteria for substance dependence as a maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three or more of the following, occurring at any time in the same 12-month period.  
1. Tolerance, as defined by either of the following.  
   ◆ The need for markedly increased amounts of the substance to achieve intoxication or desired effect.  
   ◆ Markedly diminished effect with continued use of the same amount of the substance  
2. Withdrawal, as manifested by either of the following.  
   ◆ The characteristic withdrawal syndrome for the substance.  
   ◆ The same (or closely related) substance is taken to relieve or avoid withdrawal symptoms. |
3 Taking the substance often in larger amounts or over a longer period than was intended.
4. A persistent desire or unsuccessful efforts to cut down or control substance use.
5. Spending a great deal of time in activities necessary to obtain or use the substance or to recover from its effects.
6. Giving up social, occupational, or recreational activities because of substance use.
7. Continuing the substance use with the knowledge that it is causing or exacerbating a persistent or recurrent physical or psychological problem.

Source: (Association, 1994)

Tolerance is a criterion for diagnosing dependence, the consumption thresholds may be set too high because of the sensitivity and distribution of alcohol. Lack of tolerance doesn’t mean they have a drinking problem or aren’t having any effects from their drinking.

A barrier to good clinical management of patients may be due to the lack of understanding the risks of moderate drinking. Limiting access or not referring to treatment because they don’t meet the criteria of DSM-IV can interfere or stop a person from making needed life improvements.

Some providers prefer to use the at-risk, heavy and problem drinking model instead of the DSM-IV due to the increased flexibility in characterizing the pattern of drinking. At-risk drinkers have shown some negative affects either to themselves or others, although it may not yet be a problem. Drinking and driving might be an example of this, something might not have happened but there was a potential that it could.

Heavy and problem drinking means their drinking is at a hazardous level. These terms may be more relevant for younger drinkers then older ones due to the heightened sensitivity or the presence of certain diseases such as diabetes, hypertension, dementia or cirrhosis.
The National Institute on Alcohol Abuse and Alcoholism (NIAAA) recommendations for persons over 65 as “no more than one drink per day” (Alcoholism, 1995) with further recommendations of a maximum of 2 drinks on special occasions such as weddings, holidays, with a slightly lower amount suggested for women.

A standard drink is defined as one 12 oz. can of beer or ale, a single 1.5 oz. shot of hard liquor, a 5-oz. glass of wine or a small 4 oz. glass of sherry, liqueur or aperitif.

Patterns of use among the older adult

More research is still needed but studies have suggested that there are three (3) categorizes for problem drinking in the older adult. There are early vs. late onset drinking, continuous vs. intermittent drinking and binge drinking.

A useful finding is the understanding of when a person begins having alcohol related problems. It does seem that drinking declines as a person ages some don’t start to begin to have problems until they are in their 50s.

*Early onset vs Late onset*

In the early onset, longstanding problems will usually start before 40, more likely in their 20s or 30s, whereas late onset usually starts around 40s or 50s.

Early onset makes up the majority receiving treatment with theirs reasons as to why they drink resembling those of younger age. They have tended to turn to drinking as a way to cope with problems. Diagnosis of major depression and bipolar disorders are common in this group. They will continue to drink as they age.
The late onset group appears to be healthier both physically and mentally. For this group, the drinking could have been brought on by a recent loss, death of a loved one or the end of a relationship, recent changes in health or the loss of a job or retirement. However, due to the drinking starting later in life, the adult is healthier and doesn’t have the negative stigma of being a problem drinker that providers may overlook the condition. Late onset alcoholism is a problem that is often overlooked, especially with women.

Both groups seem to drink almost daily, have outside social activities, and are home alone. Both groups may also drink as means of allative self-medicating measure.

There is a difference of opinions at treatment outcomes among some researchers with some saying late onset abusers will respond better to treatment as they are calmer and apt for informal meetings. They are more open to treatment and may end their problem spontaneously.

Characteristics Early & Late Onset Drinking

<table>
<thead>
<tr>
<th>Variable</th>
<th>Early</th>
<th>Late</th>
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<tbody>
<tr>
<td>Age</td>
<td>&lt; 25, 40, 45</td>
<td>&gt; 55, 60, 65</td>
</tr>
<tr>
<td>Gender</td>
<td>Higher in males</td>
<td>Higher in females</td>
</tr>
<tr>
<td>Drinking to Stressors</td>
<td>Common</td>
<td>Common</td>
</tr>
<tr>
<td>Extent &amp; Severity of Problems</td>
<td>More psychosocial, legal problems, greater severity</td>
<td>Fewer psychosocial, legal problems, less severity</td>
</tr>
<tr>
<td>Treatment Compliance</td>
<td>Less Compliant</td>
<td>More Compliant</td>
</tr>
</tbody>
</table>

Continuous vs Intermittent

Looking at the timeframe and frequency in which someone drinks is another way to understand patterns of drinking.
Intermittent drinking is referred “to regular, perhaps daily, heavy drinking that has resumed after a staple period of abstinence of 3-5 years or more”. (Alcoholism, 1995) They are easy to overlook yet important to identify. Problem drinkers can relapse as they get older. Providers need to get an accurate history of past and present use of alcohol. This may help them identify prior episodes of drinking and this information in turn may help them identify or anticipate something that might cause a relapse and both the patient and provider can develop a treatment plan for when they do occur.

**Binge**

“Short periods of loss of control over drinking alternating with periods of abstinence or much lighter alcohol use” (SAMHSA, 2012) is the definition that is generally used to describe binge drinking. A binge is described as “any drinking occasion in which an individual consumes five or more standard drinks” (SAMHSA, 2012) but for older adults that amount is dropped to four or more.

Identifying the older adult with a binge drinking problem can be difficult as the usual clues such as having been disciplined at work, receiving DUIs, and or stopping to hang out with friends, aren’t always seen in them.

**Risk factors of the older adult and alcohol misuse**

**Gender**

Studies have shown that older males are more to have a problem with alcohol than older females, however the ratio is still an open question even though it has been shown there is an excess of males.
Substance Abuse and the Older Adult

Loss of Partner

Abuse is noted to occur more with the older adult that has become separated or divorced and or men that are widowed. Some research shows three disorders may be triggered in males when their partner passes – depression, an alcohol problem begins and suicide. The highest rate of suicide has been seen in older males who are depressed and begin to drink heavy after their partner passes away.

Other Loss

Other losses that can trigger drinking is the loss of a family member or close friend either due to them passing or separation like retirement.

Impaired or diminished mobility is also considered in the loss category. The older adult is no longer able to get around as much as before possible due to loss of license or health condition.

Prescription and Over-the Counter Medications

In the U.S., older adults are prescribed and consume more prescription and over-the-counter medications than any age groups. They receive approximate 25-30% of prescription medications and have over half of reported adverse reactions related to these medications and with some needing hospitalization for these reactions.

Benzodiazepines, antidepressants, and opiates/opioid analgesics are the most commonly prescribed medications.
History of Psychoactive medication

Benzodiazepines were first introduced in the late 50s, and has become one of the most prescribed. Their increase was in the 60s had some asking if the U.S. was becoming overmedicated with a pill was taken for any pain, either physical or emotional.

Studies have shown that most older adults who were prescribed these medications did not intend to abuse them. The medication is usually obtained by going to the Dr. with a specific need or concern in hopes of alleviating their symptoms.

There has been some decrease in the misuse of medications due to several reasons

- Pharmaceutical companies have been developing safer medications with less undesirable side effects.
- Federal & State regulations are ever changing to help protect consumers from hazardous substances & restrict undesirable practices.
- Development of guidelines & protocols recommending better practices.
- Doctors are receiving training that is relevant to the care of the older adult
- Patients are being educated more by medical personnel about the dangers of interactions & importance of medication compliance.

Benzodiazepines with fewer adverse effects and decreased addiction potential have replaced many older medications used to treat or manage situational anxiety, general anxiety disorder, and transient insomnia.

A decline in barbiturate and stimulant prescriptions have been seen in sales reports and audits of pharmacy prescriptions. An example of this is a recent shift from Valium to shorter acting medicines Xanax and Ativan have been noted also. Flurazepam, a longer acting benzodiazepine has been switched to shorter acting medications such as Halcion and Restoril.

A decrease in psychoactive medications prescribed in nursing homes which included two selective reuptake inhibitors (SSRIs), Zoloft and Prozac and the nonbenzodiazepine anxiolytic,
BuSpar. This was a decrease when 8 of 10 of the top nursing home prescriptions were psychoactive medications.

Nonsteroidal anti-inflammatories are now being used to treat ailments like arthritis instead of prescribing opiate-containing medications.

Even though there are fewer prescriptions being ordered for the older adult, many patients are still misusing them, and some providers continue to prescribe and monitor them incorrectly.

**Pattern of use among the older adult**

According to the American Psychiatric Association’s criteria, “the drug taking pattern of the psychoactive drug user can be described as a continuum that ranges from appropriate use for medical or psychiatric healthcare practitioner to persistent abuse and dependence”. (SAMHSA, 2012)

Older adults aren’t as likely to use their medications for other reasons then as directed, their misuse is usually unintentional. Some have understood the directions or are confused as to what to take due to having multiple illnesses with multiple prescribing doctors and that aren’t aware of another doctor’s treatment plan and multiple interactions between their different medicines. This unintentional misuse can turn into abuse if the patient continues to take it incorrectly.

Older adults can become dependent on these medications without meeting criteria for dependency. A tolerance and physical dependency can occur even when taking appropriately. If stopped abruptly, the patient can go through a form of withdrawal. Older adults can become dependent without realizing it.
Continuum of Psychoactive Prescription Drug Use

Proper Use

Misuse

By Patient
- Dose level more or less than recommended
- Use for contraindicated purposes
- Use in conjunction with other medications with undesirable interactions
- Skipping doses/hoarding drugs
- Use with alcohol

By Doctor
- Prescribing unnecessarily high dose
- Prescribing without determining what other medication patient is taking
- Not clearly explaining regimen

Abuse

By Patient
- Use resulting in
  - Decline in work, school, or home performance
  - Legal problems
- Use in risky situations (e.g., driving while impaired)
- Continued use despite adverse social or interpersonal consequences

Dependence

By Patient
- Use resulting in
  - Tolerance
  - Withdrawal symptoms
  - Decline in normal activities
  - Unsuccessful attempts or a desire to cut down or control use
- Use of a substance in larger amounts or for a longer period than was intended
- Use that consumes a lot of time (including time to acquire and use the drug and to recover from its effects)
- Continued use despite knowledge that it has caused or aggravated a physical or psychological problem

Risk factors for abuse among the older adult

A number of factors influence use and potential misuse or abuse of prescription and over-the-counter medicines by the older adult. These may include the aging process, accumulating health issues, physical changes and other social stressors with the most common documented being old age, poor health and female. For women, the use of psychoactive medicine may follow getting divorce in their later years, death of a partner, a decline in health, more stress, a decrease in income, or becoming more dependent or anxious.

There are some health care and environmental factors that can place older adult at risk for misuse, adverse reaction, abuse or dependency. Ordering medications without a proper diagnosis or documented symptoms, long term use without adequate monitoring, compliance, medications prescribed that has a high potential for side effects in older adults, prescribing medications that interact with other prescribed medications, failure to provide accurate information about how and when to take the medication and its side effects. Failure to consider the influence of aging and the effects of drugs in the body is also considered to be drug misuse.

Though it is said that nonmedical use of benzodiazepines is rare, lability does exist in some groups. These include the light-to-moderate alcohol users who has shown a preference to diazepam, older adults with history of sedative abuse, abuse of multiple drugs and methadone-maintained patients, those who have developed a dependency on the drug and has experienced withdrawal symptoms after stopping the medicine abruptly.

Continued cravings for benzodiazepines doesn’t seem to occur with patients who don’t fit into any of the groups listed above and have been withdrawn from them successfully. Older adults with a history of substance abuse preferred benzodiazepines above placebos as well as
preferring the older anxiolytics and or hypnotics like Quaaludes or Miltown to benzodiazepines. Sedative abusers and methadone patients seem to prefer diazepam, lorazepam and alprazolam.

**Interactions between medication and alcohol use**

Interactions between drug-drug and drug-alcohol are important in older adults for a lot of reasons. Interactions are likely to be more concern for the older adults due to having a slower metabolism and clearance mechanisms which can result in a delay of resolving a negative reaction. Older adults are more susceptible to adverse reactions and with chronic diseases it increases the number of medications used.

Drug-drug interactions can be very dangerous, an example of this would be taking meperidine with an MAO inhibitor which can cause blood pressure fluctuations, excitability, rigidity coma and possible death. Some interactions can produce mild or subtle effects. Changes in sleep patterns, appetite or an increase in anxiety might be the only sign and may cause the provider to increase the dosage.

To use these types of medications as well as over-the-counter medications safer, is for both the provider and patient to understand how aging influences the response to, medication and to recognize how vulnerable they are to misuse or abuse.

**Illicit Drugs**

There is little literature available on illicit drug use among the older adult. Most of the available information focuses mainly on alcohol and prescription abuse. However, the topic of substance abuse in the older adult is gaining more importance, interest and research. It has been assumed, incorrectly, that the abuse ended as the patient ages. Reality is the older adult users are becoming increasingly more common.
Patterns of illicit drug use among the older adult

When talking about older adult substance abuse, two patterns of use appear, the early-onset user and the late-onset user. Early-onset users have a long history of abuse and will continue to use as they get older. The late-onset user began using as the aged.

Early-onset is “a product of abuse early in life.” (Taylor, 2012) Possible factors that may be related to first time younger to middle age use may include race, gender, social class, availability, social economic factors and life story. An example of this might be an exploration of the drug use history of blacks and whites done by Pope, Wallhagen, and Davis. It shown that African American older adults came to age in the time of the media glamorizing a drug lifestyle with its main focus on cocaine and heroin. Whereas their counterparts grew up during the “hippy” age and mainly focused on LSD and marijuana – both with habits that are easy to break in time. (Pope, 2010)

A lesser known stimulus for this group is the factors that influence their continued use as they become older.

Late-onset abuse has a less common pattern. With a variety of causes, late-onset use has factors such as a painful condition can cause them to self-medicate. Certain psychiatric conditions, such as depression, dementia or cognitive impairment may develop. Loss of a loved one, retirement, financial problems, isolation may just be a few causes of late-onset use.

Common drugs used

Some of the most common illicit drugs used by the older adult are cocaine, heroin and marijuana.
Cocaine is a very potent stimulant that can be used in several different ways such as injection, swallowing or snorting. Older adults are more prone to the dangerous effects of the drug including tachycardia, hypertension, stroke, heart attack, delirium, or heat stroke. The risk of these increase as they age.

Heroin is a highly addictive substance that can be smoked, snorted, orally ingested, or inserted rectally, but is mainly injected. Smoking and snorting the drug does not produce a “rush” as quickly or intensely as injection. New reports however state that prescription opioids have passed heroin as the “opioid of choice”. Early-onset users, such as those mentioned earlier, have used heroin for so long that they don’t see why they should change.

“From 2011 to 2014, the proportion of older adults aged 50-64 who have used marijuana in the past 30 days grew from 4.4% to 6.1%. Among those aged 65 or older, the proportion having recently used marijuana grew from 0.9% to 1.3% in the US overall.” (Unknown, 2016)

Marijuana’s pattern of use in the older adult stands apart from cocaine and heroin use. When of younger age, marijuana use started in teens but dropped when in their 30s, with this use being mainly occasional or experimental. In the older adult, the new use may be due to its effects on appetite, stress or pain. A large part of research is centered on the cognitive effects of the drug.

**Identification, Screening and Assessing the Older Adult**

Even though most older adults see their doctors on a regular basis few of these, who are at risk or misuse substances, will self-report or seek out help for their problem nor will they likely be identified despite the frequency of visits.
SUBSTANCE ABUSE AND THE OLDER ADULT

Screening for abuse and misuse

With the older adult seeing a doctor a few times throughout the year for other health conditions, makes this a good opportunity for screening for alcohol or substance abuse. Home health providers also have a unique opportunity when seeing the home bound, isolated adult and observe them for potential problems. If they are thought to have a problem, the home health provider can screen the patient during the visit. Friends and family members, people in the community who may see the older adult regularly can also help identify a potential problem and encourage them to talk to their Dr. and seek help.

Unlike the younger user, whose problem can be identified by a family member, employer, school, or courts, the older adult’s problem may still be unnoticed. Healthcare professionals need to begin to understand the serious problems that are posed by alcohol and substance abuse and the older adult.

Barriers

Assumptions of aging, not recognizing symptoms and lack of knowledge are some barriers that prevent providers or families to raise the issue of substance abuse. Alcohol and prescription drug abuse are the two main substances of abuse for the adult over 60 but providers will be seeing an increase in marijuana and other drugs in the upcoming years.

Providers are used to thinking problems of the older adult are a normal part of aging. They may not always be willing or have the time to listen to the patient when they discuss issues that could be a sign of abuse. They also may not have the training in identifying the signs of abuse.
Families can also interfere with recognizing that there is a problem. Blaming age for causes of increased confusion, sleeping issues or changes in mood instead of these possibly being due to alcohol use or misuse of medications.

Another stumbling block towards identification is thoughts that the older adult will not respond to treatment. However, some studies have shown that they are more likely to complete treatment and to have better outcomes than their younger counterparts.

Some providers are unaware that there are quality screening options available for the older adult and are intimidated in using them. However, many screens are rather easy to use and can be done quickly with no special training needed in screening or reading the results.

Every older adult should be screened on a regular basis as part of their normal exams. They may also be rescreened whenever the provider, caregiver or patient may deem it necessary. Life changes such as approaching retirement, increased stressors like assuming the care of a sick relative or spouse, or raising grandchildren may make the older adult more susceptible to substance abuse. This would be an appropriate time to screen them.

Introducing Screening

Screening can be introduced in many ways. Self-screens can be done as part of a larger presentation such as health fairs or clinics. Computers can be set up at Sr. centers, assisted living homes or retirement communities so the older adult can do their own screening in private.

Home health nurses can ask simple questions during normal visits with their patients. Volunteers, delivery persons, healthcare providers, caretakers can also include questions into their normal conversations.
Some nonmedical people may feel more comfortable using the four question CAGE assessment.

The CAGE Questionnaire

1. Have you ever felt you should cut down on your drinking?
2. Have people annoyed you by criticizing your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?

Scoring:
Item responses on the CAGE are scored 0 for “no” and 1 for “yes” answers, with a higher score an indication of alcohol problems.
A total score of 2 or greater is considered clinically significant.

Source: (Ewing, 1984)

If an answer of yes is given to any of the four questions, a referral to a clinician should be made for further evaluation. The CAGE is effective in identifying the more serious drinker and is less effective for women than men.

Some warning signs that may arise during regular conversation and should cause an in-depth screening include:

- Having detailed knowledge of certain drugs and attaching significance of its efficacy.
- Worrying that they have enough medications or if it’s time to take the medicine, even scheduling events around medication schedules.
- Continued use of the medications and requesting refills even after the original condition has improved.
- Rating events by how much alcohol was being served
- Withdrawing from family and friends
- Changes in grooming and hygiene.

Screening should be done in confidential settings and in nonthreatening and nonjudgmental manners. Older adults are more willing to accept a medical diagnosis than a psychological
diagnosis as a reason for their problems and not face the stigma that comes with alcohol or drug abuse. Connecting a diagnosis with screening questions can make them easier to discuss with the older adult. An example of this might be “I wonder if the alcohol may be a reason why your blood sugars aren’t responding like they should be?” or “Sometimes one medication can interact with another, let’s go over your medications and see if there could be a problem.”

Empathy is crucial when screening the older adult but it is important not to minimize the problem.

**Communication of negative and positive results**

Easing the process of informing the patient of a positive result may be done by

- Educating them on the effects the substance is having on their health
- Inform them that this can be treated
- Present their options
- If in-patient detox is needed, referral to an out-patient center that will monitor the patient daily will be better if they have a good home support system.

A clinician should be well prepared before discussing the results with the patient. They should have information about resources available to them, treatment programs that treat older adults, available support services such as transportation.

Accepting that they have a problem with alcohol or substance abuse is going to be hard for them to grasp. A provider or clinician might have to have repeated contact with them before they are willing to get help. It has been said that this is a process much like planting and caring for a seed, bringing it to realization depends on the older adult.

An important opportunity occurs when reporting negative results, reinforce healthy practices and continued educating on the effects of alcohol or prescription medications on their
body and health especially with age. As stated earlier, screenings should still be done even with negative results as life continues and changes happen.

**Assessment**

An assessment is used to confirm a positive diagnosis, determining its depth and to develop an individual treatment plan. Funding purposes, needs to follow criteria in the DSM-V manual. An unqualified application of criteria is a problem as symptoms of some medical conditions and psychiatric diagnosis overlap to a substance abuse disorder. Social roles that are altered may reduce the criteria applicability.

Tolerance in the older adult is not characteristic of substance dependency, as the lack of tolerance to alcohol doesn’t mean that an older adult doesn’t have a drinking problem. In order to be useful assessing, the DSM-V criteria has to be interpreted age appropriately.

Due to time of the process and cost, it is recommended by the Institute of Medicine (IOM), that assessing be done in sequences that takes a look at the different layers of the suspected problem. This will also ensure that unnecessary test are not being done.

When it is decided that the patient may benefit from reducing or quitting using the substance, the provider needs to assess if the patient understands the benefits as they may not know that it can affect their health. Providers should use this assessing process as a way to inform and motivate the older adult to seek treatment.

**Tools**

There are several different types of assessment tools that can be used when assessing the older adult for alcohol and substance abuse. Of those tools available, the CAGE Questionnaire (shown above) and Michigan Alcohol Screening Test-Geriatric Version are recommended for
assessing the use of alcohol in the older adult by the Substance Abuse and Mental Health Services Administration. The Administration also recommends the use of the Alcohol Use Disorders Identification Test or AUDIT when assessing members of ethnic groups.

Other assessments that are also used is the assessing of the older adult for alcohol or substance misuse include; Index of Activities of Daily Living (Index of ADL), Instrumental Activities of Daily Living (IADL) Scale, Geriatric Depression Scale (GDS) Short Form, Center for Epidemiologic Studies – Depression Scale (CES-D) and Health Screening Survey (HSS), Revised.

The Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test or AUDIT, for short, is a 10-item screening tool that was developed to assess alcohol consumption, behaviors and related problems by the World Health Organization (WHO). There are 2 versions of the tool, a clinician administered and self-report assessment. It is universal for genders, racial/ethnical groups and is suited for use in the primary setting. The patient should be encouraged to answer questions using a standard drink equivalency and provides examples of what a standard drink is. A score of 8 or more indicates hazardous or harmful alcohol use.

The AUDIT Questionnaire

Circle the number that comes closest to the patient's answer.

1. How often do you have a drink containing alcohol?

(0) Never (1) Monthly (2) Two - four times a week (3) Two - three times a month (4) Four or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking? [Code number of standard drinks.]

(0) 1 or 2   (1) 3 or 4   (2) 5 or 6   (3) 7 to 9   (4) 10 or more

3. How often do you have six or more drinks on one occasion?

(0) Never   (1) Less than monthly   (2) Monthly   (3) Weekly   (4) Daily or almost daily

4. How often during the last year have you found that you were not able to stop drinking once you had started?

(0) Never   (1) Less than monthly   (2) Monthly   (3) Weekly   (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

(0) Never   (1) Less than monthly   (2) Monthly   (3) Weekly   (4) Daily or almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

(0) Never   (1) Less than monthly   (2) Monthly   (3) Weekly   (4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

(0) Never   (1) Less than monthly   (2) Monthly   (3) Weekly   (4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

(0) Never   (1) Less than   (2) Monthly   (3) Weekly   (4) Daily or monthly almost daily

9. Have you or someone else been injured as a result of your drinking?
10. Has a relative or friend or a doctor or other health worker been concerned about your drinking or suggested you cut down?

(0) No   (2) Yes, but not in the last year   (4) Yes, during the last year

In determining the response categories, it has been assumed that one drink contains 10 g alcohol. In countries where the alcohol content of a standard drink differs by more than 25 percent from 10 g, the response category should be modified accordingly.

Record sum of individual item scores here. ____________________________

Procedure for scoring AUDIT:

Questions 1-8 are scored 0, 1, 2, 3, or 4. Questions 9 and 10 are scored 0, 2, or 4 only. The response is as follows:

<table>
<thead>
<tr>
<th>Question</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>Never</td>
<td>Monthly or less</td>
<td>2 to 4 times per mth</td>
<td>2 to 3 times per week</td>
<td>4 or more times per week</td>
</tr>
<tr>
<td>Question 2</td>
<td>1 or 2</td>
<td>3 or 4</td>
<td>5 or 6</td>
<td>7 or 9</td>
<td>10 or more</td>
</tr>
<tr>
<td>Questions 3-8</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost never</td>
</tr>
<tr>
<td>Questions 9 – 10</td>
<td>No</td>
<td>Yes, but not in the last year</td>
<td>Yes, during the last week</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The minimum score (for nondrinkers) is 0 and the maximum possible score is 40. A score of 8 or more indicates a strong likelihood of hazardous or harmful alcohol consumption.

Source: (Saunders J.B., 1993)

The Michigan Alcohol Screening Test

The questionnaire was developed in 1971 and is approximately 98% accurate in identifying dependent drinkers. The questions account self-appraisal of family problems, social and vocational issues that can be associated with heavy use.

A con of the test is the number of questions, making it difficult to administer at an office visit. Another con is that the questions are based on the problems over a lifetime and not the current problem, making the test unlikely to find a problem in earlier years of drinking.

The Michigan Alcohol Screening Test - Geriatric Version

1. After drinking have you ever noticed an increase in your heart rate or beating in your chest?
   - Yes
   - No

2. When talking with others do you ever underestimate how much you actually drink?
   - Yes
   - No

3. Does alcohol make you sleepy so that you often fall asleep in your chair?
   - Yes
   - No

4. After a few drinks, have you sometimes not eaten, or skipped a meal because you didn't feel hungry?
   - Yes
   - No

5. Does having a few drinks help decrease your shakiness or tremors?
   - Yes
   - No

6. Does alcohol sometimes make it hard for you to remember parts of the day or night?
   - Yes
   - No
7. Do you have rules for yourself that you won't drink before a certain time of the day?  
   - Yes  
   - No

8. Have you lost interest in hobbies or activities that you used to enjoy?  
   - Yes  
   - No

9. When you wake up in the morning do you ever have trouble remembering parts of the night before?  
   - Yes  
   - No

10. Does a drink help you sleep?  
    - Yes  
    - No

11. Do you hide your alcohol bottles from family members?  
    - Yes  
    - No

12. After a social gathering have you ever felt embarrassed because you drank too much?  
    - Yes  
    - No

13. Have you ever been concerned that drinking might be harmful to your health?  
    - Yes  
    - No

14. Do you like to end the evening with a night cap?  
    - Yes  
    - No

15. Did you find that your drinking increased after someone close to you died?  
    - Yes  
    - No

16. In general, would you prefer to have a few drinks at home rather than go out to social events?  
    - Yes  
    - No

17. Are you drinking more now than in the past?  
    - Yes  
    - No

18. Do you usually take a drink to relax or calm your nerves?  
    - Yes  
    - No

19. Do you drink to take your mind off of your problems?  
    - Yes  
    - No

20. Have you ever increased your drinking after experiencing a loss in your life?  
    - Yes  
    - No
21. Do you sometimes drive when you have had too much to drink?
- Yes  - No

22. Has a doctor or nurse ever said they were worried or concerned about your drinking?
- Yes  - No

23. Have you ever made rules to manage your drinking?
- Yes  - No

24. When you feel lonely does having a drink help?
- Yes  - No

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**Analyzing the MAST**

More than five positive answers in the test is indicative of alcoholism, a referral to a counselor or healthcare provider should be suggested.

Also, questions 8, 19, & 20 are each considered indicators of alcoholism if answered positive.

Source: (T, 2017)

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**Treatment Approaches**

**Treatment options from least intensive to in-patient**

**Brief Intervention**

Brief Intervention “is one or more counseling sessions, which may include motivation-for-change strategies, patient education, assessment and direct feedback, contracting and goal setting, behavioral modification techniques and the use of written materials such as self-help manuals.” (SAMHSA, 2012) (Fleming, Barry, Manwell, Johnson, & and London, 1997) Trained providers will conduct the brief intervention. The goal of the intervention is to motivate and encourage the drinker to change their behavior and not to place blame on others. Research has
shown that brief intervention has reduced nondependent problem drinking to moderate levels after one intervention. This technique has been used in reducing alcohol use with adolescents, nondependent problem drinkers under 65, and the older adult.

Older adults can cause obstacles to clinicians using the brief intervention. They can be ashamed, so strategies need to be supportive and nonconfrontational. Health conditions can make it difficult to recognize alcohol’s role in declines in their quality of life and functioning. These need to be remembered when treating this age group.

The acronym FRAMES is an approach used for brief interventions. It emphasizes

- Feedback of personal risk or impairment as derived from the assessment
- Personal responsibility for change
- Clear advice to change
- A menu of change options to increase the likelihood that an individual will find a responsive treatment (although multiple attempts may be necessary)
- An empathetic counseling style.
- Enhanced client self-efficacy and ongoing follow up. (Miller, 1994)

Intervention and Motivation

There are two approaches that should be considered if the older adult doesn’t respond to the brief intervention. They are intervention and motivational counseling.

Intervention

An intervention is a formal process ran by a trained counselor and includes important people in the abuser’s life. These people will confront the user with firsthand experience of their drinking. It begins before the actual intervention with the patient and includes interaction with the family and friends a couple days prior to meeting with the patient. During this time, the participants are educated on the substance abuse and its preventions as well are coached as to how to deliver their message by using an emotionally neutral and a non-accusatory tone. With older adults it is recommended that no more than one or two participants should be involved as
having too many may be overwhelming for the abuser. Labels and name calling should be avoided.

Motivational Counseling

This type of counseling is an intensive process and enlists abusers in their own recovery. Labels and confrontations should be avoided, the patient should be given alternatives to solve their problem and it places more responsibility on the patient. A counselor responds to the patient’s readiness for treatment and will have different approaches to treating the older adult at their level of readiness. The counselor will listen respectively and supportively to the patient and will accept the patient’s perspective on their abuse. They will help the abuser to identify the negative effects of the substance as well as solutions.

Specialized treatment options for older adults with abuse issues

Some late onset users with good social support systems and no mental health issues, treatments such as brief interventions or motivational counseling may be effective, but some may need more intensive treatment. Studies have shown that older adults are more compliant and will finish their treatment programs with better outcomes than some younger abusers.

A provider may triage the patient for treatment purposes based on organizing and prioritizing treatment services needed. This includes patient placement and patient matching.

Placement can include recommendations for a patient to be placed in an out-patient services or in-patient. The process is influenced by factors other than that of drinking, it includes things such as accessibility of the facility if the patient is in a wheelchair, special needs for the hearing impaired, language barriers, difference in cultural views.

In-patient or Out-patient Detoxification
SUBSTANCE ABUSE AND THE OLDER ADULT

An issue to be considered initially is if the patient is in need of detoxification management and if so does it need to be done on an in-patient or out-patient basis. Detoxification of an older adult is generally seen as a risk for them medically. Factors that indicate the need for in-patient detox are:

- A high potential for developing problems such as seizures or delirium as the dosage may have been too high or they have been using for a long time and it has been stopped abruptly or they have had these symptoms previously.
- Suicide thoughts or threats
- Presence of major psychological issues
- Unstable medical conditions
- Mixed addictions
- Lack of social supports
- Failure of response to out-patient treatment

Older patients should not be placed on high doses of benzodiazepines as these can cause more problems for them. The medication of choice as well as the schedule of the drug will decide the length of the hospital stay. The medication Klonopin may be used and if so could result in a longer hospital stay. Regular monitoring of the patient’s vital signs as well as observing for other signs of withdrawal is also needed.

Older patients need lower dosages of certain medications and the principle of starting slow and working up slowly should be used.

In-patient Rehabilitation

The abuser that is frail, suicidal, or unstable medically should be considered for in-patient services so they will be able to be monitored 24/7 by medical personnel. However, changes in the health care system have reduced the availability of this level of care or it is no longer reimbursable through health care insures. Because of this, care may need to be on a medical or psych unit in a hospital.
Residential care provides a slower pace and repetitive approach for the older adult. Specialized programs are available for the patient that has cognitive impairment either from illness or injury. These work better for those patients with no social support or access to transportation.

*Out-patient Services*

Day programs or partial hospitalization treatment programs may require the abuser to attend programs daily, five days a week. Hospital-based programs may require them to come a few hours a day for 2 or 3 days a week. The traditional program usually requires attendance in group sessions either 1-2 days a week or monthly.

Special out-patient programs usually include a psychiatric consult and individual or group therapy. The patient is required to attend regular meetings such as Alcoholics Anonymous or Narcotic Anonymous and have a case manager assigned to help the older adult connect with the appropriate class or group. After completion of the program, the case manager will help coordinate support that is community-based and monitoring to help minimize slips in progress.

*Staffing treatment facilities and concerns*

Certain guidelines should be used when staffing treatment programs. They should include the following:

- Employ staff that is trained in gerontology
- Employ staff that enjoy working with the older adult population or the elderly
- Provide training in principles that are effective with staff interaction

The staff need to understand the task of aging and how the older adult learns and processes material. At least one member of the staff should be specialized in geriatrics. Lack of proper training can interfere with reimbursement from insurances or special funding.
A registered nurse should be on hand and should have a background in addictions as well as gerontology. Large programs should have at least an RN, a social worker and a counselor with knowledge of chemical dependency.

Larger programs with links to potential services should also have available on their services a geriatric psychiatrist and psychologists, a geriatric counselor, a nutritionist, activities directors, a clergy member, occupational therapist, and a social worker.

Training for all staff as well as orientation is a must and they should understand that the outcomes for recovering adults is good. The staff should believe that the program will work and that the older adult is able to learn and change their behavior and they should show them respect.

“Legal and Ethical Issues

Autonomy

“Principles of autonomy is enshrined in our Constitution, and our courts have repeatedly confirmed our right to make our decisions for ourselves.” (SAMHSA, 2012) We cherish our autonomy and fears its loss, especially as we age.

With suggestions that judgement or abilities are impaired, older adults may not always see a provider’s effort to help as harmless or kindness. However, the label of substance abuser carries a big stigma and the older adult may become alarmed especially if the prover suggests that drugs or alcohol may be involved. Instead of admitting to the problem, they place the blame on the normal aging process.

One way of being respectful of someone’s autonomy is for the provider to inform them of all the pertinent facts related to their problem and discussing their alternatives or options with
them. Information should be provided in a way that he or she can understand, in simple terms and repeated as needed. Alternatives and their consequences should be explained.

We need to remember that providers can give the information and encouragement but only the abuser has the power to change. Respect for the person’s autonomy and their right to make choices is a main way to encourage that change.

Confidentiality

Threats to autonomy placed aside, the adult may be concerned about the practical consequences to admitting they have a problem. Insurances may not cover hospital costs if the injury was due to being under the influence, others will consider them weak and unable to live alone or family relationships may be strained are a few of these consequences and they may discourage the adult from getting treatment.

Confidentiality and privacy concerns are also fueled by the perception that they are weak and or impaired morally. An older adult may fear that admitting they have a problem may mean that they are unable to continue to live alone.

In the 1970s, the Confidentiality of Alcohol and Drug Abuse Patient Records was enacted. This law states that a person with an abuse problem is more likely to seek and succeed with treatment if they know that their need of treatment won’t be given to others unnecessarily. The regulation restricts any “patient identifying” information or information that reveals they are receiving, has received or has applied for treatment to be disclosed. The purpose of the law and regulations is to decrease the risk of information about persons in recovery will be discriminated on and to encourage them to seek treatment. It protects the person receiving or applying for
treatment. The patient does have the ability to give consent for others to receive information and it can be revoked at any time, either in writing or orally.

**Incapacity**

Most older adults are able to understand the information given to them, weigh their options and make a rational decision about their care and treatment, however a small group cannot. In such cases a health care proxy may have been designated or a guardian may have been appointed by the court to make decisions for them.

The difficulty comes when the provider screens the older adult and their mental status goes between extremes, “good days & bad days”. So how can a provider decide if someone is incapacitated? Though, there are several approaches that can be suggested, there is no easy answer to that question.

By helping the patient narrow their focus and taking it step by step, the provider may assure themselves that the patient, even though their mind may be diminished, that they understand and did what was in their best interest.

If working with the patient gradually isn’t making progress, the provider may suggest working together with another health care or mental health provider. Maybe someone that the patient is familiar with or someone who specializes in determining why they are having difficulties and if they are capable of making proper decisions.

The provider also might suggest calling in a close family member or friend to help explain the information and options available to the patient. Including them in the choice may be helpful in them accepting an option.
If all efforts are unsuccessful, they may ask if it is alright to include another family member to consult and discuss the problem. Upon consent, the provider can voice their concerns to them. It could be that the patient may have already signed a power of attorney or health care proxy.

Guardianships are appointed by the courts to manage some or all parts of another person’s life. A person seeking to be appointed as a guardian must show to the court that the person is disabled in some way by disease, illness or senility and the disability prevents them from performing necessary tasks that are needed to manage their lives. Guardianships should be done as a last resort as it diminishes the patient’s autonomy and is expensive.

**Cost, Reimbursement and Research**

**Cost of treatment for the older adult with abuse issues**

Outcome studies not only help in improving treatment but also have and significant role in the payment for treatments. Insurance companies or third-party payors want proof that the treatment used is working. Then on the other side, is the cost of alcohol problems not only to the patient but also to society and the health care system.

The cost of dependency or abuse is estimated to be over $100 billion a year. (Alcoholism, 1995) The majority of cost studies being done have been with younger patients, with little including the older adult.

A federal study was done by Holder and Blose, with half of the employees studied over 60 yrs. and analyzes over 4 years of claims done. (Holder H. a., 1992) In the study, it was “found
that mean monthly medical cost increase” for patient with problems before starting treatment, declining after treatment, and continued to decline for a couple of years after the treatment. The older adult, 65 years and over, had the highest medical cost before treatment, with reasons listed such as increased morbidity with aging and potential serious health problems caused by longer, chronic alcohol abuse.

There is more information available about the cost of alcohol abuse than there is for substance abuse. In a study done by Holder, it was estimated that “for every $10,000 spent on intervention for either abuse, $13,500 - $25,000 was saved in medical spending for the managed care provider.” (Holder H., 1987) (SAMHSA, 2012) There are gaps in information about economic effectiveness and interventions in manage care settings. Filling in these gaps are important as providers find it challenging to provide services with fewer dollars.

Studies have mainly been centered on in-patient and out-patient treatment programs. A review done by Peele showed that even though one treatment is no more effective than the other, the “reimbursement system often favors the more expensive medically based in-patient program”. (Peele, 1990)

Some providers feel that if we effectively treat the problem, will produce the largest savings in the American health care system.

**Reimbursement Issues**

A small amount of those needing treatment actually get it. It is not sure if this is due to lack of identifying the need for treatment, referring for treatment, treatment options or cost.

Private third-party insurers are funded by premiums paid for by the insured, adjustment of premiums by claims made. States generally regulate coverage minimums and premiums
through their insurance departments, except for self-insured plans. Medicare is thought of as a public third-party payor and benefits are usually authorized through legislation.

States have been turning their Medicare programs over to managed care companies. When Medicare was first started in 1965, it covered 12 days in-patient alcohol treatment with most managed care companies eliminating coverage for in-patient treatment and some cut abuse services altogether to help keep cost down.

For the older adult, the 12-day in-patient program is important as they may also have some type of physical and or cognitive problem with cessation of use, such as longer withdrawal and more severe withdrawal.

Medicare should reimburse for early intervention and prevention programs as some research has shown that these are effective with older adults. These interventions will save money by preventing cost complications of heavier drinkers.

Coverage for treatment, however, is uncertain due to ongoing changes in the delivery of treatment from in-patient to out-patient as well as changes in Medicare fee for service to managed Medicare.

Continued evaluations of outcomes can help to safeguard the health of the older abusers and help develop treatment approaches for this age group.

**Future Research Required**

As older adults age, the use of alcohol and some medications also are increasing, making this a growing concern for clinicians and researchers. The field of treatment and research will
face an increase of persons that have abuse problems as well as problems that are unique to them aging.

Research needs to address or focus on specific areas to advance and address the needs of future older adults. Five areas of research that needs to be addressed are 1) alcohol and other drug consumption, 2) treatment, 3) biomedical consequences, 4) behavioral and psychological effects and 5) special issues.

Alcohol and other drug consumption research should include:

- “Life course variations among alcohol, illicit drug, and prescription drug use patterns
- Gender and ethnic variability
- Reasons for changes in drinking and drug use patterns with aging
- Early and late onset of alcohol and drug problems
- Health care cost for the older adult maintaining abstinence compared with cost for those who reduce their consumption
- Development of valid screening instruments for illicit and prescription drug use”

Treatment Research:

- “Prevention and early intervention techniques
- The use of technology (computers, interactive voice recognition) in the treatment of substance abuse problems in older adults
- The effectiveness of various older adult-specific alcohol and drug treatment modalities
- Alcohol and drug withdrawal issues
- The effect of physical and psychiatric comorbidity on treatment outcomes
- Older subgroups (60-65, 65-70, 70-75, 75-80, 80+)
- Relationship of provider characteristics (age, similarity to client) to completion of treatment
- Risk factors for drinking and drug use relapse, including a better understanding of specific treatment needs for older adults”

Biomedical Research:

- “The effects of alcohol and drugs on aging organisms
- Alcohol and drug medication interactions
- Physiological reasons for increased sensitivity to alcohol as people age
- Medical consequences of moderate and heavy drinking and illicit drug use
- Interactions of alcohol, nicotine, and illicit drugs”
Behavioral and Psychological Research:

- “Demographics relating to older alcohol and drug use and abuse (relationship between drinking and drug use status and employment, marital status, residence, education, and other variables specifically affecting older adults)
- Older adults’ reasons for changing their drinking patterns
- Stress, coping, and adaption, and their relationship to alcohol and drug use
- Cognitive effects of moderate and heavy drinking and drug use in this age group.”

Special Issues Research:

- “Elder Abuse and neglect
- Homelessness
- Underrepresentation of older adults in treatment settings.”

Source: (SAMHSA, 2012)

Researchers need to take the lead on providing this information as with it providers and lawmakers or policymakers are able to make needed improvements.

**Conclusion**

There are a number of reasons that elderly substance abuse is not seen as a serious problem. They are the most overlooked and are more susceptible to abusing alcohol and or substances. Researchers rarely address issues faced by this group, providers are slow to identify a problem and if they do, they are reluctant to address them and there are few treatment options for them. For services to be provided adequately, providers need to be aware of the course of the abuse and the influences that may cause the disorder. Some influences can be socioeconomic status, poor or declining health, low income, homebound status and other persons that may be involved such as caregivers. They need to be aware of the physiological and the accompany effects of alcohol and or substances. Such things as the death of a loved one, new health concerns and failure to recognize or confront a problem by a caregiver may lead to the beginning or continuation of the problem. Appropriate screening and use of assessment tools can be
helpful in identifying use, abuse or dependency and can increase the likelihood of making the proper treatment plan. Lastly, future research lean towards elderly-specific identifying, intervention measures and treatment strategies.
Appendix A

Commonly Used Tools

*Index of Activities of Daily Living (Index of ADLs)*

The Index of Independence in Activities of Daily Living is an evaluation based on the functional independence or dependence of patients in bathing, dressing, going to the toilet, transferring, continence, and feeding. Specific definitions of functional independence and dependence appear below the index. (These definitions can be used to convert the data recorded in the evaluation form into the next section into an Index of ADL grade)

A—Independent in feeding, continence, transferring, going to the toilet, dressing, and bathing.

B — Independent in all but one of these functions

C—Independent in all but bathing and one additional function

D—Independent in all but bathing, dressing, and one additional function

E — Independent in all but bathing, dressing, going to the toilet, and one additional function.

F—Independent in all but bathing, dressing, going to toilet, transferring, and one additional function.

G—Dependent in all six functions.

Other—Dependent in at least two functions, but not classifiable as C, D, E, or F.

**Independence** means without supervision, direction, or active personal assistance, except as specifically noted below. This is based on actual status and not on ability. A patient who refuses to perform a function is considered as not performing the function, even though he is deemed able.

**Bathing** (Sponge, Shower, or Tub): Independent: assistance only in bathing a single part (as back or disabled extremity) or bathes self completely

Dependent: assistance in bathing more than one part of body; assistance in getting in or out of tub or does not bathe self

**Dressing**: Independent: gets clothes from closets and drawers; puts on clothes, outer garments, braces; manages fasteners; act of tying shoes is excluded

Dependent: does not dress self or remains partly undressed
Going to Toilet: Independent: gets to toilet; gets on and off toilet; arranges clothes; cleans organs of excretion; (may manage own bedpan used at night only and may or may not be using mechanical supports)
Dependent: uses bedpan or commode or receives assistance in getting to and using toilet

Transfer: Independent: moves in and out of bed independently and moves in and out of chair independently (may or may not be using mechanical supports)
Dependent: assistance in moving in or out of bed and/or chair; does not perform one or more transfers

Continence: Independent: urination and defecation entirely self-controlled
Dependent: partial or total incontinence in urination or defecation, partial or total control by enemas, catheters, or regulated use of urinals and/or bedpans

Feeding: Independent: gets food from plate or its equivalent into mouth; (precutting of meat and preparation of food, as buttering bread, are excluded from evaluation)
Dependent: assistance in act of feeding (see above); does not eat at all or parental feeding

Evaluation Form

Name___________________________ Day of Evaluation___________________________.

For each area of functioning listed below, check description that applies. (The word "assistance" means supervision, direction, or personal assistance)

Bathing—either sponge bath, tub bath, or shower
  ____ Receives no assistance (gets in and out of tub by self if tub is usual means of bathing)
  ____ Receives assistance in bathing only one part of the body (such as back or a leg)
  ____ Receives assistance in bathing more than one part (or not bathed)

Dressing—gets clothes from closets and drawers—including underclothes, outer garments, and using fasteners (including braces if worn)
  ____ Gets clothes and gets completely dressed without assistance
  ____ Gets clothes and gets dressed without assistance except for assistance in tying shoes
____ Receives assistance in getting clothes or in getting dressed, or stays partially or completely undressed.

**Toileting**—going to the "toilet room" for bowel and urine elimination, cleaning self after elimination, and arranging clothes

____ Goes to "toilet room," cleans self, and arranges clothes without assistance (may use object for support such as cane, walker, or wheelchair and may manage night bedpan or commode emptying same in morning)

____ Receives assistance in going to "toilet room" or in cleansing self or in arranging clothes after elimination or in use of night bedpan or commode

____ Doesn't go to room termed "toilet" for the elimination process

**Transfer**—

____ Moves in and out of bed as well as in and out of chair without assistance (may be using object for support such as cane or walker)

____ Moves in and out of bed or chair with assistance

____ Doesn't get out of bed

**Continence**—

____ Controls urination and bowel movement completely by self

____ Has occasional "accidents"

____ Supervision helps keep urine or bowel control; catheter is used, or is incontinent

**Feeding**—

____ Feeds self without assistance

____ Feeds self except for getting assistance in cutting meat or buttering bread

____ Receives assistance in feeding or is fed partly or completely by using tubes or intravenous fluids

Independent = 1 point  
Dependent = 0 points

Scoring: 6 = High (patient independent)  
0 = Low (patient very dependent)
After filling out the form, convert the data collected into an ADL grade by using the definitions provided in the introductory section.

Source: (Katz, 1970)

Instrumental Activities of Daily Living (IADL) Scale

Self-Rated Version Extracted from the Multilevel Assessment Instrument (MAI)

1. Can you use the telephone:

   Without help
   With some help, or
   Are you completely unable to use the telephone?

2. Can you get to places out of walking distance:

   Without help,  
   With some help, or  
   Are you completely unable to travel unless special arrangements are made?

3. Can you go shopping for groceries:

   Without help,  
   With some help, or  
   Are you completely unable to do any shopping?

4. Can you prepare your own meals:

   Without help,  
   With some help, or  
   Are you completely unable to prepare any meals?
5. Can you do your own housework:

Without help,  3
With some help, or  2
Are you completely unable to do any housework?  1

6. Can you do your own handyman work:

Without help,  3
With some help, or  2
Are you completely unable to do any handyman work?  1

7. Can you do your own laundry:

Without help,  3
With some help, or  2
Are you completely unable to do any laundry at all?  1

8a. Do you take any medications or use any medications?

(ASK Q. 8b) Yes  1
(ASK Q. 8c) No  2

8b. (ASK IF SUBJECT TAKES MEDICINE NOW)
Do you take your own medicine: (CHECK BELOW)

8c. (ASK IF SUBJECT DOES NOT TAKE MEDICINE NOW)
If you had to take medicine, can you do it. (CHECK BELOW)

Without help (in the right doses at the right time),  3
With some help (take medicine if someone prepares it for you and/ or reminds you to take it), or
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(Are you/would you be) completely unable to take your own medicines? 1

9. Can you manage your own money.

Without help, 3
With some help, or 2
Are you completely unable to handle money? 1

Note on Scoring:
If fewer than 5 items are valid, then scoring cannot be done reliably.
Source: (Lawton, 1982)

Geriatric Depression Scale (GDS) Short Form

Choose the best answer for how you have felt over the past week:

1 Are you basically satisfied with your life? YES/NO

2 Have you dropped many of your activities and interests? YES/NO

3. Do you feel that your life is empty? YES/NO

4. Do you often get bored? YES/NO

5. Are you in good spirits most of the time? YES/NO

6. Are you afraid that something bad is going to happen to you? YES/NO

7. Do you feel happy most of the time? YES/NO

8. Do you often feel helpless? YES/NO

9. Do you prefer to stay at home, rather than going out and doing new things? YES/NO
10. Do you feel you have more problems with memory than most? **YES/NO**

11. Do you think it is wonderful to be alive now? **YES/NO**

12. Do you feel pretty worthless the way you are now? **YES/NO**

13. Do you feel full of energy? **YES/NO**

14. Do you feel that your situation is hopeless? **YES/NO**

15. Do you think that most people are better off than you are? **YES/NO**

Answers in bold indicate depression, and each answer counts as one point. For clinical purposes, a score greater than 5 suggests depression and warrants a followup interview. Scores greater than 10 are almost always depression.

Source: (Sheikh, 1986)

*Center for Epidemiologic Studies – Depression Scale (CES-D)*

For the 20 items below, circle the number next to each item that best reflects how frequently the indicated event was experienced in the past 7 days.

<table>
<thead>
<tr>
<th>Event</th>
<th>Time Frame</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or none of the time (less than 1 day)</td>
<td>0 point</td>
<td></td>
</tr>
<tr>
<td>Some or a little of the time (1-2 days)</td>
<td>1 point</td>
<td></td>
</tr>
<tr>
<td>Occasionally or a moderate amount of time (3-4 days)</td>
<td>2 points</td>
<td></td>
</tr>
<tr>
<td>Most or all of the time (5-7 Days)</td>
<td>3 points</td>
<td></td>
</tr>
</tbody>
</table>

**DURING THE PAST WEEK:**

1. I was bothered by things that usually don't bother me. ________
2. I did not feel like eating; my appetite was poor. ________
3. I felt that I could not shake off the blues even with help from my family or friends____
4. I felt that I was just as good as other people____
5. I had trouble keeping my mind on what I was doing. ______
6. I felt depressed. ______
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7. I felt that everything I did was an effort. ______
8. I felt hopeful about the future. ______
9. I thought my life had been a failure. ______
10. I felt fearful. ______
11. My sleep was restless. ______
12. I was happy. ______
13. I talked less than usual. ______
14. I felt lonely. ______
15. People were unfriendly. ______
16. I enjoyed life. ______
17. I had crying spells. ______
18. I felt sad. ______
19. I felt that people disliked me. ______
20. I could not get "going." ______

Scoring:

Since items 4, 8, 12, and 16 reflect positive experiences rather than negative ones, the scale should be reversed on these items so that 0 = 3, 1 = 2, 2 = 1, and 3 = 0. To determine the "depression score," add together the number for each answer. The score will be somewhere in the range of 0 to 60. A score of 16 or greater indicates that some depression may have been experienced in the past week.

Sources: (Radloff, 1977)

Health Screening Survey (HSS), Revised

Check the appropriate answer

1. **In the last three months**, have you been dieting to lose weight?
   
   __YES __NO

   **IF YES:** How many pounds have you managed to lose?

   ___0 ___1-3 ___4-7 ___8 or more

2. **In the last three months**, have you performed physical activity or exercise in your leisure time at least 20 minutes without stopping, enough to make you breathe hard and/or sweat?

   __YES __NO

   **IF YES:** On average, how many days per week have you been exercising

   ___1-2 ___3-4 ___5-6 ___Every day
3. **In the last three months**, have you been smoking cigarettes at all?

__YES __NO

**IF YES**: On average, how many cigarettes have you been smoking each day?

__1-9 __10-19 __20-29 __30 or more

4. **In the last three months**, have you been drinking alcoholic drinks at all (e.g., beer, wine, sherry, vermouth, or hard liquor)?

__YES __NO

**IF NO**, go to question 5.

**IF YES**, ANSWER 4a through 4c.

4a. On average, how many days per week have you been drinking **beer or wine coolers**?

__None ___1-2 ___3-4 ___5-6 ___Every day

On a day when you have had wine, sherry, or vermouth to drink, **how many glasses, bottles, or cans** have you been drinking?

__1-2 ___3-4 ___5-8 ___9-14 ___15 or more

**AND**

4b. On average how many **days per week** have you been drinking **wine, sherry, or vermouth**?

__None ___1-2 ___3-4 ___5-6 ___Every day

On a day when you have had wine, sherry, or vermouth to drink, **how many glasses** have you been drinking?

1-2 ___3-4 ___5-8 ___9-14 ___15 or more

**AND**

4c. On average how many **days per week** have you been drinking **liquor** (gin, vodka, rum, brandy, whiskey, etc.)?

__None ___1-2 ___3-4 ___5-6 ___Every day

On a day when you have had liquor to drink, **how many single shots** have you been drinking?

__1-2 ___3-4 ___5-8 ___9-14 ___15 or more

**5. In the last three months** have you felt you should:

a. lose some weight ___No ___Sometimes ___Quite Often ___Very Often
b. cut down or stop smoking ___No ___Sometimes ___Quite Often ___Very Often

c. cut down or stop drinking ___No ___Sometimes ___Quite Often ___Very Often

d. do more to keep fit ___No ___Sometimes ___Quite Often ___Very Often

6. **In the last three months** has anyone annoyed you or got on your nerves by telling you to:

   a. change your weight ___No ___Sometimes ___Quite Often ___Very Often

   b. cut down or stop smoking ___No ___Sometimes ___Quite Often ___Very Often

   c. cut down or stop drinking ___No ___Sometimes ___Quite Often ___Very Often

   d. do more to keep fit ___No ___Sometimes ___Quite Often ___Very Often

7. **In the last three months**, have you felt guilty or bad about:

   a. your weight ___No ___Sometimes ___Quite Often ___Very Often

   b. how much you smoke ___No ___Sometimes ___Quite Often ___Very Often

   c. how much you drink ___No ___Sometimes ___Quite Often ___Very Often

   d. how unfit you are ___No ___Sometimes ___Quite Often ___Very Often

8. **In the last three months**, have you been waking up wanting to:

   a. exercise to keep fit ___No ___Sometimes ___Quite Often ___Very Often

   b. smoke a cigarette ___No ___Sometimes ___Quite Often ___Very Often

   c. have an alcoholic drink ___No ___Sometimes ___Quite Often ___Very Often

   d. have something to eat ___No ___Sometimes ___Quite Often ___Very Often

9. Now that you have completed this form, do you think you **currently** have:

   a. a weight problem ___Definitely ___Probably ___No ___Don’t Know

   b. a smoking problem ___Definitely ___Probably ___No ___Don’t Know

   c. a drinking problem ___Definitely ___Probably ___No ___Don’t Know

   d. a fitness problem ___Definitely ___Probably ___No ___Don’t Know

10. Thinking back, would you say at any time in the **past** you had:

    a. a weight problem ___Definitely ___Probably ___No ___Don’t Know
b. a smoking problem ___ Definitely ___ Probably ___ No ___ Don’t Know

c. a drinking problem ___ Definitely ___ Probably ___ No ___ Don’t Know

d. a fitness problem ___ Definitely ___ Probably ___ No ___ Don’t Know

Scoring:

The HSS contains four subscales: one measuring amount of alcohol consumption (question 4 a, b, c), the CAGE questionnaire (questions 5-8), one for self-perception of current problem with alcohol (question 9), and one for self-perception of past problem with alcohol (question 10). Consumption of 20 or more drinks per week, two or more positive responses to the four CAGE questions, self-perception of a current problem with alcohol use, or self-perception of a past problem with alcohol use indicates problem drinking.

Source: (Fleming M. a., 1991)

Bogunovic, O., Substance abuse in aging and elderly adults, Psychiatric Times, 7/2012 http://www.psychiatrictimes.com

Botek, Anne-Marie; Prescription drug abuse skyrocketing among elderly population. AgingCare.com


Cheh, V., Duda, N., Carlson, B., CyBulski, K., Evaluation of the Home Health Independence Demonstration: Evaluation of the Home Health Independence Demonstration: Barriers to a successful experiment were multifaceted, and different policy issues remain, Centers for Medicare and Medicaid Services, Office of Research, Development and Information, Baltimore MD, 2007


SUBSTANCE ABUSE AND THE OLDER ADULT


Ligon, Jan; When older adult substance abuse affects others: what helps and what doesn't?. Journal of Socialwork Practice in the Addictions 13:223-226


Reardon, C., The changing face of older adult substance abuse. Social Work Today 12:8, 1/2012


SUBSTANCE ABUSE AND THE OLDER ADULT


Unknown; Marijuana used by older adults: Retrieved from UW Alcohol and Drug Abuse Institute, 5/2016 http://LearnAboutMarijuanaWA.org/factsheets/olderadults.htm
