



Module III: Screening and Assessment

I. Learning Objectives

At the end of the training, health care professionals will be able to:

- Describe the continuum of substance use, including abstinence, low-risk and non-problematic use, at-risk use, abuse, and dependence.
- Summarize the data in support of universal substance abuse screening in generalist health care and social services settings.
- Choose appropriate substance abuse screening instruments for their settings, considering patient/client mix and relevant research
- Perform substance abuse screening and brief assessment in their health care and social services settings.
- Teach trainees to teach others.

II. Chronology

This material is best taught over approximately 2 hour and 40 minutes with interspersed, supplementary experiences. Below is a suggested schedule for lecture and practice sessions on screening and assessment.

A. Session One – Introduction (50 minutes)

5 minutes - Introduction

Lecture: Introduce the learning objectives and expectations for this curriculum segment.

5 minutes – Prevalence and Impact

Lecture: Briefly describe the prevalence and the major health, psychosocial, societal, and economic effects of substance use disorders in the US. If available, present data on the competence and performance of substance abuse recognition, intervention, and referral by practitioners of your profession. Emphasize that a new generation of professionals with competence in this area is needed to address this major, national public health issue. (Use slides from introductory module.)

10 minutes – The Substance Use Continuum

Lecture: Describe the continuum. Describe the common earlier and later symptoms and signs of substance use disorders. Choose the most relevant health care or social services setting for which prevalence data is available. Ask the learners to guess the prevalence of each of the categories on the continuum. Provide the actual data. Encourage questions.

5 minutes – Recommended Clinical Actions

Lecture: Briefly describe clinical recommendations for managing patients in each category of the continuum. Emphasize that research shows that screening can

identify most individuals with risky or problematic substance use, that brief interventions are effective for at-risk use and substance abuse, and that substance abuse treatment is effective is substance abuse and dependence. (Slides on assessing the accuracy of screening instruments are optional.) Summarize the argument for universal substance abuse screening. Encourage questions. Remind the learners that you will be teaching intervention and referral skills at a later session; screening and assessment will be taught first.

10 minutes – Identifying Categories of Use

Case discussions: Present the learners with 3 case scenarios of individuals who represent three different categories on the continuum. Have the learners vote on the appropriate categories and defend their responses. Give the correct answers and the rationale.

5 minutes – Barriers

Discussion: Remind the learners that research has shown that few generalist health care and social services professionals regularly recognize patients/clients with substance use disorders, intervene, or make appropriate referrals for treatment. Ask them to suggest why this might be so. Discuss why various reasons are invalid and how various barriers can be overcome.

10 minutes – Introduction to Screening

Lecture: Introduce the concept of screening. Introduce one screening device as the most appropriate device for your health care or social services setting. Describe data on the accuracy of the screening device in your setting. Show examples of other screening devices, mentioning that some might be preferable elsewhere based on age, gender, pregnancy status, racial/ethnic group, setting, and prevalence of drug disorders. Emphasize that every patient/client should undergo periodic screening for alcohol and drug disorders and that all professionals must be able to administer such screening and respond appropriately to the results. Mention that the next session will focus on actual screening, and the learners will be expected to practice screening with each other in role-play exercises.

Possible Activities After Session One

- A1. Read a research report on the prevalence of substance use disorders in a relevant practice setting
- A2. Read a review article on the prevalence and impact of substance use disorders in the US
- A3. Read pertinent parts of the DSM-IV or ICD-10 classification of substance use disorders

B. Session Two – Screening (55 minutes)

5 minutes – Review and Introduction

Lecture: Review key points from the previous lecture – that substance use disorders are common in applicable practice settings, that they are associated with numerous and significant personal, family, and societal difficulties, that intervention and

treatment are effective, and that all health care and social services professionals must be able to identify patients with risky or problematic substance use and intervene or refer, and that research has shown that numerous screening devices can identify most patients/clients with risky or problematic substance use. Remind students of the substance use continuum and the prevalence of various categories of use in a relevant setting. State the key learning objective of this session – that learners will begin to acquire competence and confidence in substance abuse screening.

15 minutes – Substance Abuse Screening Protocol

Lecture: Review the particular screening device chosen for your setting. Ask the group for suggestions and list possible strategies for making transitions to bring up substance use. Show the group your “recipe” for substance abuse screening. Emphasize that the learners should try variations on this recipe to find ones most comfortable to them. Explain what constitutes a positive screen and what the results mean.

5 minutes – Setup for Screening Demonstration

Discussion: Have the learners read a short clinical scenario describing a patient/client to undergo screening. As they read the scenario, ask them to underline possible consequences of substance use. After they are done reading, ask the learners to list the possible negative consequences of substance use. By show of hands, ask the learners to identify the category of substance use depicted by the case. Identify misconceptions that led to incorrect responses.

5 minutes – Screening Demonstration

Demonstration: Demonstrate substance abuse screening. Ask a learner to come to the front of the room with you to portray the patient/client in the scenario. Let the other learners know that you will ask them at the end of the interview: (1) In sequence, what did I do, and how did I do it (content and process)? (2) What worked well, and what might I have done differently? Begin the interview in the middle, asking one or two questions on another topic before making a transition to substance use. Have a learner time the interview segments. Ensure that the entire screening interview is completed within 2 minutes to demonstrate that substance abuse screening can be integrated into routine procedure.

20 minutes – Screening Practice and Feedback

Practice, feedback, and discussion: Have the students pair up and practice the same scenario, starting in the middle of the interview. One student plays the clinician at first; then the other. Allow 3 minutes for the role-play itself, stating that screening must be accomplished quickly if learners are to incorporate substance abuse screening into routine practice. Allow 2 minutes for feedback from the patient/client to the practitioner. In the next 5 minutes, take comments from patients/clients about what the practitioner did well, and take comments from the practitioners what they found challenging and need to practice. Repeat after swapping roles.

5 minutes - Summary

Lecture and discussion: Summarize the key points of the session and entertain questions. If applicable, challenge learners to practice screening on at least 3 patients/clients before the next session. Emphasize: learners are to screen only, not assess or intervene; for patients/clients with positive screens, they should simply inform their supervisors. (Adjust these ground rules as necessary to fit your settings.)

Possible Activities After Session Two

- B1. Read a research report on the validity of a particular screening device
- B2. Read a review article on the advantages and disadvantages of various screening devices
- B3. Practice screening with simulated or instructor patients/clients. *
- B4. Screen at least 3 patients/clients in practice settings and record notes on what you did well, what you would wish to do differently next time, the patients'/clients' reactions to being screened, the results of the screen, and any available follow-up on patients/clients who screened positive.*

* Some practice is highly recommended if at all possible.

C. Session Three – Assessment (55 minutes)

5 minutes – Debriefing and Transition to Assessment

Discussion: For activity B1 or B2, plan questions to ask the learners about the articles. For activities B3 and B4, ask the learners to discuss their experience. What went well when they did the screening? Did anything go not so well? Was it difficult to make a transition? How did they do asking the questions, *per se*? What responses did they get? Emphasize that defensiveness does not necessarily mean that the screening technique was faulty. If possible, conclude that screening can be easily incorporated into routine interviews and is well accepted by most patients/clients.

Ask the learners the meaning of and next steps for negative and positive screens, and ensure appropriate understanding. Ask the learners to guide you in reproducing the continuum on a display, and ensure appropriate understanding.

10 minutes- Introduction to Assessment

Lecture: Explain the purpose and methods of brief assessment.

15 minutes – Demonstration of Screening and Brief Assessment

Demonstration: Ask a learner to portray the same patient/client as in the last session. As in the last session, advise the other learners that you may stop the interview periodically to ask them: (1) What was I doing and how did I do it (content and process)? (2) What worked well, and what might I have done differently? (3) What might I do next? Begin the interview in the middle, asking one or two questions on another topic before making a transition to substance use. Stop initially

after the screen is positive, and debrief. Using observations of the learners and your own, build a list of Do's and Don'ts. Continue into the assessment, stopping periodically for a similar debriefing, adding to the lists of Do's and Don'ts. Demonstrate probing into at least two areas of consequences. If there is no time to demonstrate, explain how sensitive questions on legal issues and financial consequences can be asked.

20 minutes – Brief Assessment Practice and Feedback

Practice, feedback, and discussion: Have the students pair up and practice the same scenario, starting in the middle of the interview. One student plays the clinician at first; then the other. Allow 3 minutes for the role-play itself, stating that screening must be accomplished quickly if learners are to incorporate substance abuse screening into routine practice. Allow 2 minutes for feedback from the patient/client to the practitioner. In the next 5 minutes, take comments from patients/clients about what the practitioner did well, and take comments from the practitioners what they found challenging and need to practice. Repeat after swapping roles.

5 minutes - Summary

Lecture and discussion: Summarize the key points of the session and entertain questions.

Possible Activities After Session Three

- C1. Read pertinent parts of the DSM-IV or ICD-10 classification of substance use disorders, if not already done after Session One
 - C2. Read a research report on the clustering of symptoms for DSM substance use disorders, or a validated diagnostic instrument.
 - C3. Practice screening and assessment with simulated or instructor patients/clients*
 - C4. Practice screening and assessment in a practice setting*
- * Some practice is highly recommended.

III. Instructor materials

- Hard copies of slides
- Reading list for possible assignments
- Guide to administering role-play exercises
- Sample case scenarios – Instructors may wish to develop their own scenarios to better reflect their own settings.

IV. Participant materials

- Participant handouts
- Skill self-assessment sheets for screening and assessment
- Handouts in the Appendix containing examples of screening instruments.

Module II: Screening and Assessment

This handout is organized in the order of the Module II Slides. Following the number and title of each slide are notes that the presenter can use to educate the participants about each area of the material.

Slide 1, Module IV: Screening and Assessment – In this module you'll learn how to screen and assess clients/patients for alcohol and drug problems.

Slide 2, Learning Objectives – You'll be able to cite data on the accuracy of substance abuse screening and choose an appropriate screening instrument for your setting. You'll be able to perform screening and brief assessment interviews. And you'll be able to teach others these skills.

Slide 3, Continuum – Before we can discuss screening and assessment, we must have a common vocabulary for describing important clinical distinctions of substance use. For each category of use, I'll give an approximate adult prevalence just with regard to alcohol.

The first category of use is abstinence, which means no use at all. In most states, 30% to 35% of adults abstain from alcohol.

The second category is low-risk, non-problematic use. Individuals in this category use substances in a manner that places them at low risk for negative consequences. In most states, the prevalence of low-risk, non-problematic use of alcohol is about 50%.

The middle category is high-risk, non-problematic use. This category applies to individuals who use substances in a way that research has shown puts them at higher risk for substance-related negative consequences. Any use of a "harder" drug, such as sedatives, stimulants, cocaine, and heroin, would certainly fall into this category. Research has not determined how much marijuana use puts individuals at risk for negative consequences.

Slide 4, Standard Drink – Before we talk about how many drinks puts individuals at risk for negative consequences, we must agree on the definition of a drink. This slide shows standard drinks. As you can see, 12 ounces of beer, 5 to 6 ounces of wine, and 1 to 1.5 ounces of hard liquor contain the same amount of alcohol – about 12 grams. Many drinkers believe that beer is safer to drink than hard liquor, but the human body makes no distinction between one beer and one shot of liquor.

Slide 5, At-Risk Drinking – Here you can see the amounts of alcohol that put individuals at risk for negative consequences. The numbers are lower for women, because women generally weigh less than men and absorb alcohol more completely and quickly from their stomachs than men do. The numbers are even lower for the elderly because of heightened sensitivity and prolonged metabolism. These numbers are based purely on research that shows that increases in negative consequences of drinking are associated with drinking these quantities. It is important to understand that these findings are based on averages. Some individuals will

be able to drink these quantities or more and not suffer negative consequences. Other individuals will suffer negative consequences with less consumption.

Slide 6, Continuum (repeated) – Between 5 and 10% of individuals are high-risk, non-problematic drinkers.

Substance abuse, the next category, is defined as continued substance use despite repeated adverse consequences of use. I'll talk more about the common consequences or symptoms of substance abuse when I talk about assessment. Between 5 and 10% of individuals fall into this category.

The last category, substance dependence, is synonymous with alcoholism and addiction. Individuals in this category, like substance abusers, are suffering from repeated negative consequences of substance use. The main symptom that distinguishes dependence from abuse is loss of control. Substance abusers may recognize negative consequences and choose to drink despite them. Alcoholics and addicts exhibit at least intermittent loss of control over their substance use.

This loss of control is a biologic phenomenon. You may remember that the DNA in the nucleus governs how the cell operates. From the DNA, special transcription enzymes produce RNA, which in turn directs the production of proteins. These proteins serve as structural components of the cells, and as enzymes that govern chemical reactions. Using rats, researchers have studied the effects of prolonged cocaine and heroin exposure on cells of the mesolimbic system, the part of the brain responsible for pleasure sensation and biologic drives. Prolonged exposure to these substances results in transcription of RNA from different DNA sequences in the nucleus. Thus, addiction seems to result from a highjacking of the part of the brain that controls pleasure and biologic drives, so that the same mechanism for inducing rats to eat and procreate now induces rats to continue seeking drugs. This would explain why alcoholism and addiction runs in families, as one can imagine how different genes make brain cells more or less susceptible to being highjacked by exposure to potentially addictive substances.

So, the primary symptom of dependence is a difficulty in controlling substance use that stems from a highjacking of the brain's biologic drive mechanism. Another common symptom of dependence is preoccupation with thoughts of obtaining substances. These thoughts can be very intrusive, occurring during work or childcare. Another common symptom of dependence is compulsive use, where individuals who intend to use a little end up using a lot, leading to binges and benders.

Another possible symptom of substance dependence is physical dependence. Physical dependence means a susceptibility to withdrawal brought on by the regular use of a substance. For example, individuals with a physical dependence on alcohol who suddenly stop drinking may experience shakes, sweats, nausea, hallucinations, and seizures. More serious withdrawal can produce disorientation; this is called delirium tremens. It is important to realize that many alcoholic individuals – individuals who have lost control of their drinking – do not suffer from withdrawal when they stop drinking. Also, regular use of hallucinogens or

PCP can lead to loss of control of use but never produces physical dependence. Thus, individuals may be substance dependent, even though they are not physically dependent.

Also, realize that individuals can be physically dependent on substances but not addicted. One example involves heavy caffeine use, which often produces a withdrawal syndrome of headaches but rarely leads to other negative consequences or loss of control. Another more important example is individuals who take opioids like morphine for chronic pain or benzodiazepines like Valium[®] or Xanax[®] for anxiety disorders. Such individuals become physically dependent, meaning that they will withdraw if they suddenly stop their medicine. However, most stay in control of their medication use, taking it as directed, and most enjoy improvements in function rather than negative consequences.

So, the most important symptom of substance dependence, alcoholism, or addiction, is loss of control, which may be intermittent. Other possible symptoms are preoccupation, compulsivity, and physical dependent. About 5% of individuals are alcohol dependent.

Notice that for most categories quantity and frequency of use is not a definitional criterion. The keys to identifying categories of substance use are negative consequences and loss of control.

Also notice that the categories of use are the same for alcohol, marijuana, cocaine, heroin, and all substances. Users of hard drugs are not automatically considered abusers or addicts. Their category of use also depends on negative consequences and loss of control.

Slide 7, Rationale for Generalist Care - Overall, then, in the general population, 15% to 20% of individuals will fall into the three right-hand categories, where using less would improve health or decrease risk. Most of these individuals never receive any intervention or treatment. Research tells us that interventions and treatment can be more successful and less intrusive and costly for patients with less severe substance use disorders. And interventions and treatments have been shown to be cost effective by reducing health care utilization and criminal justice events. So, generalist health and social services professionals are needed to identify individuals as early as possible for interventions or referral to treatment.

Slide 8, Generalist Care for Substance Use & Related Disorders – This slide shows a scheme for generalist care of individuals with regard to substance use. All individuals should be screened regularly. By screening, I mean ask a brief set of questions to help decide whether high risk, abuse, or dependence are likely. If the screen is positive, do a brief assessment to determine which category of substance use the individual falls in. For abstinent or low-risk users, deliver reinforcing prevention messages. For high risk users or abusers, deliver brief interventions and follow up. For substance dependent individuals, attempt to refer to treatment. If treatment is declined or not available, try brief and full motivational interventions, and follow up. All of these steps will be discussed in further detail, and now we'll talk more about screening.

NOTE: Slides 9 through 17, on understanding research on screening instruments, could be skipped by the presenter depending upon the needs of the participants.

Slide 9, Evidence on Screening – Again, screening means administering a brief set of questions to determine whether an individual has a high likelihood of being in the high-risk, abuse, or dependence categories. I emphasize the word “likelihood” as screening is not intended to establish with certainty what category an individual falls into; it’s only a quick way of determining who might need some help.

There are many different instruments – different sets of questions – that can be used for screening. It is important that you be an intelligent consumer of research on substance abuse screening, so you can decide what screening would be best for your setting.

Most research on substance abuse screening instruments compares the results of screening with the results of a more definitive procedure that establishes a substance-related diagnosis. Usually the definitive is a standardized interview that produces an accurate substance-related diagnosis.

Slide 10, Evidence of Screening (Continued) – Studies on screening instruments compare the results of screening instruments to the results of the diagnostic interviews. In this table, positive means substance abuse or dependence, and negative means no substance abuse or dependence.

A true positive screening result means that the screen was positive for an individual who truly has a substance use disorder, according to the diagnostic interview. A true negative screening result means that the screen was negative for an individual who truly does not have a substance use disorder. A false positive result means that the screen was positive for an individual with a negative diagnostic interview – so the positive result was in error. Similarly, a false negative result means that the screen was negative for an individual with a positive diagnostic interview – so the negative result was an error.

On this table, when researchers are assessing the accuracy of a screen, they put numbers in each box that represent the numbers of subjects who are true positives, true negatives, false positives, and false negatives. Then they calculate some numbers that indicate accuracy.

Slide 11, Evidence of Screening (Continued) – First, they look at the subjects with positive diagnostic interviews. They divide the number of true positives by the total number of individuals with positive diagnostic interviews – the true positives plus the false negatives. The result is called the sensitivity. If there were no false positives – if every individual who truly had a substance use disorder had a positive screen, then the sensitivity would be 100% or 1. So, a 90% sensitivity would mean that 9 out of every 10 people with a substance use disorder had a positive screen, and 1 of every 10, or 10%, were false negatives.

Slide 12, Evidence of Screening (Continued) – Next, they look at the subjects with negative diagnostic interviews. They divide the number of true negatives by the total number of individuals with negative diagnostic interviews – the true negatives plus the false positives. The result is called the specificity. If there were no false positives – if every individual who had negative substance use disorder had a negative screen, then the specificity would be 100%

or 1. So, an 80% specificity would mean that for every 10 people who don't have a substance use disorder, 8 have a negative test.

Slide 13, Evidence of Screening (Continued) - Now, sensitivity tells us: Of all the individuals who have a substance use disorder, what proportion has there are two other numbers that are even more important to clinicians. These numbers help us figure out the probability that an individual has a disorder based on the result of the screening test.

First is the positive predictive value (PPV). This number is computed by dividing the true positives by all the individuals with a positive screen. This number answers the question: Of all the individuals with a positive screen, what proportion truly have a substance use disorder? It tells us the probability that an individual with a positive screen has a substance use disorder. If there are no false positives, then the positive predictive value is 100% or 1. The critical piece of information that this tells us is: For an individual with a positive screen, what are the chances that that individual has a disorder? This is an important number for clinicians.

Slide 14, Evidence of Screening (Continued) – This slide shows the calculation of another important number for clinicians: the negative predictive value (NPV). This number answers the question: Of all the individuals with a negative screen, what proportion truly do not have substance use disorder? It tells us the probability that an individual with a negative screen does not have a substance use disorder. The probability that an individual with a negative screen does have a substance use disorder is $1 - NPV$.

Slide 15, Evidence of Screening (Continued) – So the most important numbers for clinicians are the PPV and the NPV. Screening tests with a high PPV have low numbers of false negatives, so fewer people who have substance use disorders will be missed. Screening tests with a high NPV have low numbers of false positives, so less effort will be needed to identify individuals with positive screens who actually do not have substance use disorders.

Slide 16, Evidence of Screening (Continued) – This slide shows the critical impact that the prevalence of substance use disorders has on the PPV and NPV. The prevalence of substance use disorders means the proportion of individuals in a particular setting who have a substance use disorder. These two tables show the predictive values under two different circumstances. The upper table shows the predictive values for a screen with 90% sensitivity and 80% specificity when the prevalence of substance use disorders is 5%, meaning that one of every twenty clients/patients have substance use disorders. Notice that with a fairly high sensitivity and specificity, the positive predictive value is quite low – 0.32. This means that only about 1 in 3 individuals with a positive screen actually has a substance use disorder. The negative predictive value is 0.88, meaning that about 1 in 8 individuals with a negative screen will actually have a substance use disorder and be missed.

The lower table shows the predictive values under the same conditions, except the prevalence of substance use disorders is 20%, or 1 in 5. With this prevalence, the positive predictive value is 0.53, meaning that slightly over half the individuals with a positive screen will have a substance use disorder, and slightly under half won't. This demonstrates that it is critical

never to make diagnoses of substance use disorders from screens, since there are significant false positives.

Slide 17, Evidence of Screening (Continued) – This slide summarizes the most important point from the last slide – that the higher the prevalence of substance use disorders in your clinical setting, the higher proportion of true positives versus false positives. With a lower prevalence, the proportion of false positives increases.

Later when we talk about particularly screening instruments, you'll see that several instruments are very effective at identifying individuals who have a high probability of having a substance use disorder. Next, let's look at the evidence that brief interventions are effective.

Slide 18, Barriers to Involvement – In summary then, research has shown that practitioners can identify patients with risky or problematic substance use and intervene successfully with individuals with at-risk substance use or early disorders. And for those with dependence, treatment is clearly effective. Unfortunately, despite the scientific evidence, many practitioners do not routinely engage in substance abuse screening, intervention, and referral to treatment.

There are many barriers to practitioner involvement in these activities. Many practitioners don't see alcohol or drug use as in their purview. Many have stereotypes that interfere with recognition. For example, studies have shown that individuals who are white, female, and employed are especially unlikely to be recognized. Many practitioners feel pessimistic about helping individuals with alcohol and drug problems. Their most serious and resistant disorders, as these are the individuals who are frequent users of many health and social services. When practitioners begin to recognize individuals with interventions or treatment. Stigma and discomfort can prevent practitioners from discussing substance use with patients or clients, and the lack of skills training can reinforce the discomfort.

END OF SESSION ONE

SESSION TWO

Slide 19, Definition of Screening – Now let's focus more on screening. Screening is defined as a procedure to recognize individuals with a disorder before obvious manifestations of the disorder have occurred. Thus the goal of screening is early recognition, while intervention or treatment are most effective, and before serious and sometimes irreversible consequences have occurred. Screening is well accepted for many health care problems, such as cancer and depression, and screening for substance use disorders is recommended by the US Preventive Services Task Force and several other expert groups.

Slide 20, Choose Screens By... – Before practitioners begin alcohol and drug screening they must decide which screening instrument, or which screening questionnaire, to use. There are several criteria to consider in choosing a screening instrument for your setting.

One is the number of items. In inpatient psychiatric settings, some recommended substance abuse screening questionnaires have dozens of items. This is fine when patients or clients have lots of time on their hands, but in most settings screening instruments must be very short – not just for patients or clients, but also for clinicians.

Another consideration is the method of administration. Some of the most accurate screening instruments are administered in writing. Sometimes such instruments are administered and scored by computer. In many settings, this is not feasible, and we need screening instruments that practitioners find are easily committed to memory and easily scored in one's head.

A third consideration is which substance to screen for. As we discussed previously, if the prevalence of a particular disorder is low, most the positive screening results may be false positives. In most settings, the prevalence of alcohol disorders is high enough to warrant screening. In some settings, the prevalence of drug disorders may be high enough that they should be screened for, as well.

Finally, we must consider accuracy. Ideally the screening instrument we choose for our settings should have been researched and shown accurate for individuals like our patients or clients. Unfortunately, for many population subgroups, such research has not performed, so we must choose and modify our screening instrument on the basis of our clinical experience.

In your Appendix I you'll see several screening instruments reproduced. I'll go over some of the advantages and disadvantages of each of them.

Slide 21, AUDIT – The Alcohol Use Disorders Identification Test is possibly the most accurate screening test for at-risk and problematic drinking. Each of 10 items has four multiple choice responses, and the scoring is different for each response. The AUDIT is known to be accurate for individuals of many different nations and cultures. The major disadvantage is that it must be administered in writing.

Slide 22, CAGE – The CAGE questions are the most commonly used substance abuse screen in the US. CAGE is a mnemonic for each of the 4 yes/no questions. They are easily memorized and incorporated in a conversational manner in routine interviews. They are easily scored, as one positive response is considered a positive screen. The CAGE is quite accurate for alcohol abuse and dependence. The C, A, and G questions are often positive when there are negative consequences of drinking. The E question may be positive for alcohol dependent individuals who drink in the morning to prevent alcohol withdrawal. A disadvantage of the CAGE is that it misses at-risk drinking and drug disorders.

Slide 23, CAGE-AID – The CAGE-AID questions are the CAGE questions Adapted to Include Drugs. "AID" stands for Adapted to Include Drugs. Each CAGE question was adapted to focus on drugs and alcohol. For example the original C question, "Have you ever tried to cut down on your drinking?" was changed to, "Have you ever tried to cut down on your drinking or drug use?" Many patients are reluctant to admit to drug use because of more stigma and the possible difficulties that may result if drug use is recorded in their records. The CAGE-AID allows practitioners to detect possible drug problems even without patients

or clients admitting directly to drug use. A disadvantage is the CAGE-AID also misses at-risk drinkers.

Slide 24, CRAFFT – The CRAFFT was developed because the CAGE questions are not particularly accurate for adolescents. It can be easily memorized, incorporated into routine interviews, and scored in one's head. It assesses well for alcohol and drug problems but not for at-risk use.

Slide 25, SMAST-G – The Michigan Alcoholism Screening Test was one of the first screens for alcoholism. This screen is a short version of the MAST for geriatric patients. It contains 10 yes-no questions. It can be administered in writing or by interview, but the questions are not easily memorized for an interview. It covers alcohol only. It was validated against DSM-III-R diagnoses of alcohol abuse or dependence. It was developed by Dr. Fred Blow and colleagues at the University of Michigan.

Slide 26, DAST – The Drug Abuse Screening Test is the best known screening questionnaire for drug problems. It was developed for patients in psychiatric settings. It consists of 28 items, which is probably too many for most generalist health care and social services settings. However, there is also a Short DAST with 10 questions that might be more useful.

Slide 27, Trauma Questions – A small number of patients with substance use disorders will say no to all questions on substances. Therefore, researchers have tried to identify some questions that predict alcohol problems without specific mention of alcohol. The Trauma questions may be especially effective for men in emergency room settings.

Slide 28, TWEAK – The TWEAK is the most accurate alcohol screen for pregnant women. Such women are especially difficult to screen because of the stigma of drinking during pregnancy and, in some states, the fear of prosecution.

Slide 29, Two-Item Conjoint Screen – The Two-Item Conjoint Screen, or TICS, is just two questions that are easily incorporated into an interview and scored in one's head. One positive response is considered a positive screen. It screens for alcohol and drug problems but does not identify at-risk users.

Slide 30, Q/F Questions on Alcohol – Since most screening instruments do not screen well for at-risk drinking, these questions are recommended for use with most screening instruments. Some practitioners ask these questions first and then go on a screening questionnaire. Others believe that direct questions on quantity and frequency of drinking can make some heavy drinkers defensive and make subsequent screening questions less effective. The first two questions can be used to calculate an approximate number of drinks per week. Remember, men who have 14 or more drinks per week and women who have 11 or more drinks per week are at measurably increased risk for alcohol-related negative consequences. The third question identifies possible binge drinkers. Remember, men who drink 5 or more drinks in an occasion, and women who drink 3 to 4 or more drinks in an occasion, are also at higher risk for these consequences.

Slide 31, Other Questions to Consider – Other routine questions can be helpful as part of a screening process. Asking whether individuals have experimented with certain substances can be a helpful way to begin asking about drug use, because individuals are more likely to admit to previous use than current use. It is often useful to ask patients or clients whether they ever have had any help or treatment for alcohol or drug problems.

It's also very important to pay attention to non-verbal cues when you're doing substance abuse screening. Regardless of their responses, if individuals hesitate, stammer, lose eye contact, or get defensive, consider the screen positive.

Slide 32, Transitions to Screening – Perhaps one of the most difficult aspects of substance abuse screening is making a comfortable transition to this topic with patients or clients who are seeing you for unrelated reasons. There are at least six strategies for making this transition.

Mentioning that you're about to ask some routine questions can help a patient or client avoid feeling singled out for these questions.

Integrating these questions into other routine questions about preventive health, such as smoking, can make for a natural sequence of inquiry.

When asking about medical problems that run in families, one can ask about alcohol or drug problems. Then ask whether the individual drinks. If yes, move into the screening questions.

When taking a diet history, one can ask about liquids after information has been collected on solids. Ask specifically whether the individual drinks. If so, move into the screening questions.

When asking about leisure activities, one can ask if an individual enjoys a drink now and then.

A very effective transition strategy is first to inquire about stresses, then about coping strategies. If the patient or client does not mention drinking or drug use as a coping strategy, ask about other means of coping (TV, reading, exercise). Then ask if drinking or using drugs ever helps them cope, relax, or unwind.

Are there any other transition strategies that anyone would suggest?

Slide 33, Sample Adult Screening Protocol – So, how do we put all of this together? Here's one recipe. First use a transition strategy, such as stresses and coping, or which ever you prefer. Next, if the patient or client hasn't already mentioned drinking, ask if he or she drinks. Next, ask if he or she has ever experimented with drugs. If not, ask the CAGE questions; if so, ask the CAGE-AID. If these questions are negative, ask the quantity and frequency questions to identify individuals who might be at-risk drinkers. Although this sounds a little complicated, it actually goes very quickly.

Next we'll talk about what to do for patients with various screening results. Before we do, are there any questions about screening?

Slide 34, Non-Verbal Cues – Remember that when you are screening, pay attention to non-verbal cues as well as verbal responses. Any clear change in non-verbal cues should be regarded as a positive screen, even with negative verbal responses.

Slide 35, For Especially Sensitive Situations - To maximize the effectiveness of screening in sensitive situations, it helps to build up to screening questions. You can ask about substance use by friends. You can ask about previous substance use. When individuals answer these questions, demonstrate that you will be accepting and non-judgmental. This may help some individuals respond more accurately to screening questions about their current substance use.

It can also help to make normalizing statements before asking about substance use. For example, first say, "I know that some individuals in your situation will have some alcohol from time to time." Then ask, "Do you ever drink some alcohol?"

Slide 36, Screen Results and Actions – If the screen is positive, remember that there can be false positives. So next we need to do a more definitive assessment to determine whether there is truly a substance use disorder. We'll be covering assessment soon.

If the screen for substance use disorders is negative and there is at-risk substance use, a brief intervention would be appropriate. We'll be covering brief interventions after we cover assessment.

Individuals who are low-risk problematic users should receive a reinforcing prevention message. Individuals who are abstaining should be asked why. One common reason is previous substance use disorders, which are often useful to know about. Another common reason for abstinence is a family history of substance use disorders which has made substance use seem risky or unattractive. All abstainers should also receive a reinforcing prevention message.

Slide 37, Prevention Messages - Prevention messages should encourage individuals to continue their present substance use pattern. They should be very brief – perhaps just a sentence or two. They should contain information that's likely to be relevant to the patient rather than the practitioner. They should take into account the individual's cultural background; we'll explore more about what this means in some examples.

Slide 38, Compose a Prevention Message – Consider a 22-year-old married pregnant woman who abstains from all substances. She lives with a sister who smokes tobacco and marijuana. What would be an appropriate prevention message for her? "It's terrific that you're not drinking, smoking, or using any drugs, because they could certainly hurt the baby." It might be useful to explore other aspects of this case:

- Do you feel tempted to smoke cigarettes or pot at times? Is it hard to resist?
- Did you know that even inhaling your sister's smoke is not healthy? Does she smoke near you? Could you ask her to smoke elsewhere?

Slide 39, Compose a Prevention Message (Continued) – Next consider a 35-year-old man whose parents are alcohol dependent. He avoids drinking after work with co-workers. What prevention message would you want to deliver? “Because of your genetic risk for alcoholism, it’s great that you avoid drinking.”

END OF SESSION TWO

SESSION THREE

Slide 40, Generalist Care for Substance Use & Related Disorders – This slide reminds why the screening and assessment process is critical, as it determines what we do next – provide a prevention message, provide a brief intervention, or attempt referral to treatment. The screening and assessment skills we’ve talked about today are, by design, quite brief. In a specialized alcohol or drug treatment program, assessment may actually take days, and many aspects of individuals’ function are examined. The brief screening and assessment techniques we’ve focused on are designed for busy generalist health professionals. The process can take place over more than one visit but need not be exhaustive.

Slide 41, Definition of Assessment – Next we’ll talk about assessment. Remember, screening just identifies individuals who MIGHT have substance use disorders. Assessment is the process by which we determine when people truly have substance use disorders. So, we do assessments when screens are positive. Also, if individuals manifest several symptoms of substance use disorders, you might do an assessment instead of a screen, because screens can have false negatives.

Slide 42, Assessment Tools – Now, let’s think about what sources of information can be helpful in an assessment.

Alcohol breath tests, blood alcohol levels, urine drug screens, and hair tests can be helpful, but they have serious limitations. If an individual shows up for a routine appointment with alcohol on the breath, then maintenance drinking and alcohol dependence are likely. Otherwise these tests only tell us whether individuals are using; they don’t tell us more about where individuals are on the continuum.

Slide 43, Alcohol and Drug Tests - Alcohol and drug tests are not as helpful as many individuals think. There are many limitations to these tests. One limitation is they only give evidence of use, not abuse or dependence. Remember that use of “hard” drugs does not necessarily mean abuse or addiction. Therefore, the specificity of a direct alcohol or drug test is not 100%.

The sensitivity may also be low, because individuals who abuse substances may not have used them recently enough to show up as positive on the test. Some substances will show up as positive only if they have been taken in the past few hours. Most substances will not produce a positive urine test result after 3 days since the last use.

Other important limitations are expense and the ability of many people to circumvent these tests. In fact, there are web sites that instruct individuals how they can “fool” drug tests.

Therefore, direct alcohol or drug tests are often just one piece of information in a potentially complicated scenario.

Slide 44, LFT’s and CBC’s – Excessive drinking can cause liver inflammation or enlarged red blood cells, which can be identified by blood tests. (For certain professions: GGT tends to be elevated most, and SGOT (AST) tends to be elevated more than SGPT (ALT). However, only 25% of individuals with alcohol abuse or dependence will have abnormal tests. In other words, most people with alcohol problems will have normal blood tests. Also, there are many other medical conditions that can cause these abnormalities, and taking some medicines as prescribed, such as anticonvulsants, can cause them, too. So, blood tests can be helpful as pieces of the puzzle but are rarely definitive.

Slide 45, Physical Examination – Physical examination can be helpful. Track marks (scars or signs of recent injection on arms or elsewhere) can suggest intravenous drug use. Damage to the nasal mucosa (the pink tissue inside the nostrils) can suggest cocaine use. Otherwise, most physical findings occur from diseases that occur after many years of advanced substance use disorders. So, physical examinations can tip us off to advanced substance use disorders but usually don’t help in early identification of substance use disorders.

Slide 46, Collateral Report – Conversations with significant others or family members can unearth information about substance use and abuse. However, having these conversations behind a patient’s/client’s back may be unethical and may cause severe damage to your trust with the patient/client. In addition, research shows that reports about substance use by family members are often less than self-reports, because individuals who are substance dependent often hide their use.

Slide 47, Self-Report – So the best source of information about substance use and symptoms of substance use disorders is the patient or client. Even though individuals might minimize, interviewers with basic skills can usually gather enough information to categorize individuals accurately on the continuum. One of the keys to conducting an assessment interview is to use techniques that build rather than hinder rapport and trust.

Slide 48, Brief Assessment Interview – Before we get to interview techniques, let’s talk about what we’re really looking for when we do an assessment. Remember, the goal of an assessment is to place an individual accurate in one of the five categories of the continuum. To do this, we must gather information on possible consequences of substance use, because continued substance use despite repeated consequences defines substance abuse. Someone who is suffering negative consequences might be dependent, so we would need to assess whether there is physical dependence (withdrawal symptoms when an individual suddenly quits or cuts down) or some loss of ability to control substance use. Also, information on the quantity and frequency of substance use is helpful contextually and is essential for identifying at-risk users.

Slide 49, Later Consequences – Now let's focus on some common negative consequences. Individuals with chronic or severe dependence may have serious medical conditions. Alcohol dependence can lead to cirrhosis of the liver, cardiomyopathy (a weak heart muscle), chronic pancreatitis (inflammation of the pancreas that can cause episodic or chronic severe abdominal pain), and certain cancers of the upper respiratory or gastrointestinal tract. Intravenous drug use can lead to hepatitis B or C, which can also cause cirrhosis, and, of course, HIV infection and AIDS. And unsafe sex, which often occurs under the influence of various substances, can also lead to HIV infection and AIDS. Of course, severe trauma and disability is possible, too. Chronic, heavy substance use can lead to full-fledged dementia (senility that is not related to Alzheimer's disease) or more subtle intellectual, cognitive, and psychiatric disorders. Chronic heavy alcohol use can lead to cerebellar degeneration, which causes difficulty with balance and coordination. It can also cause peripheral neuropathy, which can lead to numbness and pain, especially in the legs. And of course, loss of bonds with family members, social isolation, unemployment, homelessness, and incarceration are common later signs of severe substance use disorders. These individuals are quite easy to recognize, and specialized treatment can help. But in another sense, we have failed many of these individuals because we did not identify their substance use disorder and provide assistance earlier, before these terrible consequences occurred, and while treatment or brief interventions might have been more effective.

Slide 50, Earlier Consequences: – So our goal is to identify individuals as early as possible in those three rightmost categories on the continuum of substance use. Let's try to identify individuals with at-risk substance use even before they've suffered any consequences, when brief interventions can be effective. Let's try to identify individuals with substance abuse before they've suffered more serious consequences, again, when brief interventions are often effective. And let's try to identify dependent individuals before they suffer more dramatic or irreversible consequences.

These are the seven categories in which consequences of substance use occur. Let's look at the common earlier consequences in each of these categories.

Slide 51, Early Consequences: Psychological – Psychological consequences are often the first consequences to appear. There may be anxiety, a sense of stress or worry. There may be dysphoria, a sense that things are not right. There may be irritability, mood swings, hostility, or a general sense that people are not themselves. Susceptible individuals who use amphetamine, methamphetamine, or cocaine can become paranoid and psychotic, as though they are schizophrenic. Basically, any psychiatric symptom can occur as a result of intoxication, overdose, or withdrawal from a substance. So anyone with a psychiatric symptom should be at least be screened for a substance use disorder.

Slide 52, Conventional Explanatory Model – There's an important myth to dispel about why people use substances. In our psychologically oriented society, we often assume that substance use results from a sense of anxiety or dysphoria, which started from stressful circumstances, for example, stresses at work or home. And then, of course, the substance use can become problematic in and of itself, leading to more stressful circumstances, more anxiety or dysphoria, and more use. This explanatory model is accurate for some individuals.

Slide 53, Another Possible Model – For many individuals, it's important to know that the cycle can start with substance use. The substance is used for any reason – socializing, pleasure – and use increases to cause difficulties, which lead to anxiety or dysphoria, and the cycle continues. Now, the vast majority of individuals can point to stresses in their lives. Individuals commonly attribute their substance use to their stresses. But realize that this explanation is often not accurate. Most people with stresses do not abuse substances.

Slide 54, Another Possible Model (Continued) – This slide shows the possible interactions between stressful circumstances, psychiatric symptoms, and substance use. A downward spiral can start anywhere. And when considering how to help people, each of these three realms may need separate attention.

Slide 55, Dual Diagnosis – This leads to the concept of dual diagnosis, which occurs when an individual has a substance use disorder and another psychiatric disorder. Ideally, the practitioner aims to identify which disorder is primary – in other words, which disorder came first – and which is secondary. A critical intervention, if possible, is to stop the substance use and then observe for psychiatric symptoms in the absence of substance use. However, sometimes the psychiatric symptoms are so severe that we must treat them, even if the substance use is continuing.

Slide 56, Early Consequences: *Family* – The second realm of negative consequences is the family. The psychological consequences can quickly lead to dysfunction in relationships between partners and between parent and child. Children of substance abusing parents can exhibit behavioral disturbances in school and at home. Studies document that emotional and somatic symptoms are more common in individuals with substance abusing family members. Remember to ask about concerns about substance use by family members for anyone exhibiting symptoms such as dysphoria, anxiety, headache, back pain, or other common symptoms.

Slide 57, Early Consequences: *Friends* – The third realm of negative consequences is friends. Individuals with substance abuse or dependence often gravitate toward others who use substances similarly, so they may alienate and lose long standing friends.

Slide 58, Early Consequences: *Biomedical* – Another realm of negative consequences is the biomedical arena. Many individuals with substance use disorders have no biomedical consequences at all. Those who abuse alcohol may develop abdominal pain for a variety of reasons related to alcohol. They may have blood pressure that is labile (many ups and downs) and difficult to control with medication. Initially, alcohol abusers may gain weight because they are taking in their usual diet plus the additional calories of alcoholic drinks. Only severely alcohol dependent individuals will lose weight. However, weight loss can be an earlier sign of amphetamine or cocaine abuse, since these substances can depress appetite. Of course, an early sign of substance abuse, or even the first negative consequence of risky use, can be accidents or injuries. Finally, abuse of many substances can lead to difficulty with sleep, sexual function, or menstrual function. For example, alcohol can help individuals fall

asleep more quickly. However, it can interfere with deep REM sleep, which is necessary for individuals to feel well rested.

Slide 59, Early Consequences: *Work/School* – Another realm of negative consequences relates to work or school. Individuals may have attendance problems, sometimes prompting requests for work excuses from physicians. They may perform poorly and have frequent changes in jobs. On the other hand, very highly career-motivated individuals, such as many health professionals, may preserve their work function while exhibiting dysfunction in many other areas. Maintaining their function at work helps convince them that they're really OK, that they don't have an alcohol or drug problem.

Slide 60, Early Consequences: *Legal* - Of course, there can be legal consequences of substance use.

Slide 61, Early Consequences: *Financial* - And financial consequences. The earliest financial consequence is spending more than one can afford on obtaining substances and activities involving substance use. Also, be aware that gambling problems can co-occur with substance use disorders.

Slide 62, Brief Assessment Interview – So those are the consequences to look for in an assessment interview. Remember to interpret consequences in the context of the individual's culture. As you're identifying consequences, get an idea of the time course. According to the DSM-IV, anyone who has repeated consequences of substance use over more than one month qualifies for diagnosis of substance abuse.

Individuals who exhibit negative consequences of substance use should then be assessed for substance dependence.

Slide 63, Brief Assessment Interview (Continued) – Two important symptoms of substance dependence are loss of control and physical dependence. Loss of control can be assessed by asking individuals if they've made rules about their substance use, which many people do when they begin to sense that their substance use is getting out of control. Then ask if they've had difficulty adhering to these rules.

To assess, physical dependence, ask individuals whether they've experienced particular symptoms when they suddenly quit or cut down, or during mornings after they've used more than usual.

Other symptoms to ask about are preoccupation, compulsivity, and cravings. Preoccupation refers to intrusive thoughts about drinking or using, during other activities, such as work or child care. Compulsivity means difficulty in stopping using once an episode of use has started. Intense cravings can occur with dependence and can make it very difficult to control use. Substances that can produce very intense cravings include cocaine and nicotine.

Slide 64, Brief Assessment Interview (Continued) - If this has not yet been covered, it is important to ask about quantity and frequency of substance use as part of an assessment.

This information is needed to identify at-risk users. For substance abusers and substance dependent individuals, this information does not help categorize them on the continuum, but it does provide useful baseline information

Slide 65, Brief Assessment Interview (Continued) - Helpful questions for alcohol or drugs are:

- Days per week of use
- Quantity used on a normal day
- Maximum quantity used in the past three months

Slide 66, For Patient/Client Discomfort - If an individual shows discomfort during assessment, there are several options. You could change the topic and come back to assessment questions later. Asking questions about other social areas, such as stresses, can help establish more rapport and make it easier for individuals to talk more about their substance use. You could ask whether the questions are making the individual uncomfortable and ask for permission to continue. You could explain why the questions are important. Tying them into the individual's concern can be especially effective.

Slide 67, Summary – So, in summary, it's clear that screening, intervention, and treatment are effective. Since most people with alcohol and drug problems never receive these services, it's important that generalist health care and social services professionals learn to provide them. Choose a screen that you think will work best in your setting. For negative screens, deliver prevention messages. For positive screens, do more detailed assessment, looking for repeated negative consequences, loss of control, physical dependence, and quantity and frequency of use

END OF SESSION THREE

References

- Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: a review. *Addiction* 1993;88:315-35.
- Brown RL. Screening, Assessment, and Brief Intervention. In Fleming MF, et al, eds. *Project SAEFP*. Kansas City: Society of Teachers of Family Medicine, 1990.
- Fleming MF, Barry KL, Manwell LB, Johnson K, London R. Brief physician advice for problem alcohol drinkers. A randomized controlled trial in community-based primary care practices. *JAMA*. 1997;277(13):1039-45.
- Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL. Benefit-cost analysis of brief physician advice with problem drinkers in primary care settings. *Med Care* 2000;38(1):7-18.
- Fleming MF, Murray M. *An International Medical Education Model For the Prevention and Treatment Of Alcohol Use Disorders*. Rockville, Maryland: National Institute on Alcohol Abuse and Alcoholism, 1996.
- National Institute on Alcohol Abuse and Alcoholism. *The Physicians' Guide to Helping Patients with Alcohol Problems* (NIH publication No. 95-3769). Rockville, Maryland: NIAAA, 1995.

APPENDIX I

Screening Instruments

ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)

The following questions are about **the past year**.

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

- | | |
|---|---|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> 2 to 3 times a week (3) |
| <input type="checkbox"/> Monthly or less (1) | <input type="checkbox"/> 4 or more times a week (4) |
| <input type="checkbox"/> 2 to 4 times/month (2) | |

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> None (0) | <input type="checkbox"/> 5 or 6 (3) |
| <input type="checkbox"/> 1 or 2 (1) | <input type="checkbox"/> 7 or 9 (4) |
| <input type="checkbox"/> 3 or 4 (2) | <input type="checkbox"/> 10 or more (5) |

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

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

4. How often during the last year have you found that you were unable to stop drinking once you had started?

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

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

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

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?

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

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

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

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

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

9. Have you or someone else been injured as the result of your drinking?

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

10. Has a relative, friend, or a health worker been concerned about your drinking or suggested you cut down?

- | | |
|--|--|
| <input type="checkbox"/> Never (0) | <input type="checkbox"/> Weekly (3) |
| <input type="checkbox"/> Less than monthly (1) | <input type="checkbox"/> Daily or almost daily (4) |
| <input type="checkbox"/> Monthly (2) | |

****A score of 8 or more is suggestive of at-risk drinking. Patients who score positive on the AUDIT should be assessed for potential alcohol-related problems.**

AUDIT Reference: Babor TF, de la Fuente JR, Saunders J, Grant M. *AUDIT: The Alcohol use Disorders Identification Tests: Guidelines for use in Primary health Care*. Geneva, Switzerland: World Health Organization, 1992)

CAGE

- C** Have you felt you ought to CUT down on your drinking?
- A** Have people ANNOYED you by criticizing your drinking?
- G** Have you felt bad or GUILTY about your drinking?
- E** Have you ever had a drink first thing in the morning (EYE-OPENER) to steady your nerves , or get rid of a hangover, or get the day started?

Score: 1 yes answer indicates a positive screen and the need for further assessment and follow-up.

Reference: Ewing JA. Detecting alcoholism: The CAGE questionnaire. *JAMA*. 1984;252:1905-1907.

CAGE-AID (The CAGE questions adapted to include drugs)

- C** Have you felt you ought to CUT down on your drinking or drug use?
- A** Have people ANNOYED you by criticizing your drinking or drug use?
- G** Have you felt bad or GUILTY about your drinking or drug use?
- E** Have you ever had a drink or used drugs first thing in the morning (EYE-OPENER) to steady your nerves , or get rid of a hangover, or get the day started?

Score: 1 yes answer indicates a positive screen and the need for further assessment and follow-up.

Reference: Brown, RL, Rounds LA. Conjoint screening questionnaires for alcohol and drug abuse. *Wisconsin Medical Journal* 1995;94:135-140

CRAFFT for Adolescents

- C** Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?
- R** Do you ever use alcohol or drugs to RELAX, feel better about yourself?
- A** Do you ever use alcohol or drugs while you are by yourself (ALONE)?
- F** Do you ever FORGET things you did while using alcohol or drugs?
- F** Do your FAMILY or FRIENDS ever tell you that you should CUT down on your drinking or drug use?
- T** Have you ever gotten into TROUBLE while you were using alcohol or drugs?

Score: 2 or more yes answers indicate a positive screen and the need for further assessment and follow-up.

Reference: Knight JR, Shrier LA, Bravender TD, Farrell M, Vander Bilt J, Shaffer HJ. A new brief screen for adolescent substance abuse. *Arch Pediatr Adolesc Med* 1999;153:591-596.

Short Michigan Alcoholism Screening Test -Geriatric Version (S-MAST-G)
 © The Regents of the University of Michigan, 1991.

	YES (1)	NO (0)
1. When talking with others, do you ever underestimate how much you actually drink?	_____	_____
2. After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?	_____	_____
3. Does having a few drinks help decrease your shakiness or tremors?	_____	_____
4. Does alcohol sometimes make it hard for you to remember parts of the day or night?	_____	_____
5. Do you usually take a drink to relax or calm your nerves?	_____	_____
6. Do you drink to take your mind off your problems?	_____	_____
7. Have you ever increased your drinking after experiencing a loss in your life?	_____	_____
8. Has a doctor or nurse ever said they were worried or concerned about your drinking?	_____	_____
9. Have you ever made rules to manage your drinking?	_____	_____
10. When you feel lonely, does having a drink help?	_____	_____
TOTAL S-MAST-G SCORE (0-10)		_____

Scoring: 2 or more "yes" responses indicative of alcohol problem.

For further information, contact Frederic C. Blow, Ph.D., at the University of Michigan Alcohol Research Center, 400 E. Eisenhower Parkway, Suite A., Ann Arbor, MI 48104, 734-998-7952.

MAST - G Reference: Blow FC, Brower KJ, Schulenberg JE, Demo-Danberg LM, Young JP, Beresford TP. The Michigan Alcoholism Screening Test-Geriatric Version (MAST-G): A new elderly-specific screening instrument. In *ALCOHOLISM: Clinical and Experimental Research*. 1992;16(2):372

DAST

The Drug Abuse Screening Test is the best known screening questionnaire for drug problems. It was developed for patients in psychiatric settings. It consists of 28 items, which is probably too many for most generalist health care and social services settings. There is also a short version of the DAST with 10 questions.

References: Skinner HA. The drug abuse screening test. *Addict Behav.* 1982;7(4):363-71; Maisto SA, Carey MP, Carey KB, Gordon CM, Gleason JR. Use of the AUDIT and the DAST-10 to identify alcohol and drug use disorders among adults with a severe and persistent mental illness. *Psychol Assessment.* 2000;12(2):186-92.

Trauma Scale

Since your 18th birthday...

1. Have you had any fractures or dislocations to your bones or joints?
2. Have you been injured in a road traffic accident?
3. Have you injured your head?
4. Have you been injured in an assault or fight?
5. Have you been injured after drinking?

Score: One point for each yes response; sum all points; total: 0-5 points

Reference: Bradley KA, Boyd-Wickizer J, Powell SH, Burman ML. Alcohol screening questionnaires in women: A critical review. *JAMA.* 1998;280(2):166-171; Skinner HA, Holt S, Schuller R, Roy J, Israel Y. Identification of alcohol abuse using laboratory tests and a history of trauma. *Ann Intern Med.* 1984;101(6):847-51.

TWEAK for Pregnant Women

T Tolerance
W Worried
E Eye-opener
A Amnesia
K K (C)ut down

Score: 1 yes answer indicates a positive screen and the need for further assessment and follow-up. Score 2 points each for tolerance or worried; Score 1 point each for eye-opener, amnesia, or kut down; sum all points; total 0-7 points.

Reference: Russell M. New assessment tools for risk drinking during pregnancy: T-ACE, TWEAK, and others. *Alchol Health Res World.* 1994;18(1):55-61.

Two-Item Conjoint Screen

1. In the last year, have you ever drank or used drugs more than you meant to?
2. Have you felt you needed to cut down on your drinking or drug use in the last year?

Score: 1 positive response, 45% chance of a current substance use disorder (SUD); two positive responses have a 75% chance of a current SUD.

Reference: Brown RL, Leonard T, Saunders LA, Papasouliotis O. A two-item screening test for alcohol and other drug problems. *J Fam Pract.* 1997;44(2):151-160.

APPENDIX II

FEEDBACK FORM ON SCREENING

I. Content

A. Preliminary questions on use Attempted Not attempted
Clear? Excellent Could be better Smooth? Excellent Could be better
NOTES: (How was it excellent, or how could it be better next time?)

B. Used CAGE or CAGE-AID as appropriate Attempted Not attempted
Clear? Excellent Could be better Smooth? Excellent Could be better
NOTES: (How was it excellent, or how could it be better next time?)

II. Process - words, intonation, eye contact, facial expression, body language

A. Displayed comfort Excellent Could be better
NOTES: (How was it excellent, or how could it be better next time?)

B. Expressed warmth Excellent Could be better
NOTES: (How was it excellent, or how could it be better next time?)

C. Showed respectful, nonjudgmental attitude Excellent Could be better
NOTES: (How was it excellent, or how could it be better next time?)

APPENDIX III FEEDBACK FORM ON ASSESSMENT

I. Content

A. Asked appropriate questions about:

1. Biomedical Health Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

2. Mental Health Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

3. Family Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

4. Other Social Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

5. Work/Social Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

6. Legal Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

7. Financial Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

B. Asked appropriate questions about:

1. Quantity and frequency of alcohol use Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

2. Quantity and frequency of drug use Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

C. Asked appropriate questions to investigate possible links between substance use and possible consequences Excellent Could be better

NOTES: (How was it excellent, or how could it be better next time?) _____

D. Asked appropriate questions to assess chronicity

Excellent Could be better
 NOTES: (How was it excellent, or how could it be better next time?) _____

II. Process - words, intonation, eye contact, facial expression, body language

A. Displayed comfort Excellent Could be better
 NOTES: _____

B. Expressed warmth Excellent Could be better
 NOTES: _____

C. Showed respectful, nonjudgmental attitude Excellent Could be better
 NOTES: _____

APPENDIX IV

Designing and Executing Role Playing Exercises for Medical Education

According to McKeachie, the purposes of using role playing exercises in teaching include developing insight into human relations problems, providing a concrete basis for discussion, maintaining or arousing interest, providing a channel in which feelings can be expressed under the guise of make-believe, and developing increased awareness of one's own and others feelings [McKeachie]. In addition, role-playing allows for practice of interactive clinical skills. These strengths can make role playing exercises a powerful teaching format for medical education.

Although the apparently impromptu nature of role-playing provides an exciting focus for learning, an effective role playing exercise is always planned and structured. This guide is intended to help instructors design and administer effective role playing exercises.

THE BASIC ELEMENTS OF AN EDUCATIONAL ROLE PLAYING EXERCISE

There are several basic elements to effective educational role-playing. First, instructions for the role-playing are issued to the participants. Then, as the role-playing unfolds, the players are observed. At some point, the role playing stops and discussion ensues. Ultimately, generalizations or conclusions are made. Underlying this basic sequence is an important control function--monitoring and ensuring the integrity of the exercise's process and the satisfaction of its predetermined educational goals.

These basic elements will now be described in the context of a role playing exercise for a small group, consisting of five to eight participants and a facilitator. Subsequently, variations in these elements will be presented; illustrating how role-playing exercises can be adapted for different educational goals and groups of various sizes.

Instructions

The participants, including the role players and all others present, must be made aware of the precise expectations for the exercise. Instructions to the role players should include a description of their personas and their relationships with other personas, as well as the setting and the context of the interaction. Often players are the sole recipients of information about their own personas, and the role playing centers around discovering this information. As discussed below, the observers should receive instructions, too. Brief written instructions are useful supplements to explicit verbal instructions for reminding each participant of his or her task as the exercise proceeds. The more complicated the instructions, the more advisable it is to write them down.

The Role Playing

The players then commence playing their parts. It is crucial that the players be instructed in advance not to slip in and out of their roles. This is essential for eliciting accurate performances and for preventing side comments that disrupt the continuity. It is usually helpful to give the players an option to escape from their roles at any time by calling for a time out. This option takes the pressure off a player who, at a difficult juncture, may not know how to proceed. The instructor should reserve the right to call a time out, as well, but should use it sparingly. It is important that the role-playing not be stopped too frequently.

Observation

Each non-player participant should be assigned to observe the role-playing. This keeps all group members involved and facilitates the subsequent discussion. Assignments for observing should be issued before the role-playing begins. They should be as specific as possible, so that the observers will be prepared for a focussed discussion. For example, when the instructor's goal is for the learners to identify the difficulties for physician assistants dealing with a particular kind of situation, the instructions might be, "As you watch, imagine yourself in the physician assistant's role. What feelings do you experience as the physician assistant attempts to deal with this situation?" When the overall goal is to elaborate the advantages and disadvantages of options for managing a difficult clinical situation, the instructions to the observers might be, "Be ready to discuss the techniques the physician assistant attempts to use to handle the situation, how well these techniques seem to work, and other techniques that physician assistants might use." In general, observing assignments should include instructions on whom to observe and for what.

The instructor may assign individuals different observer tasks. This can help an instructor use a role-playing to meet more than one objective.

It is sometimes useful to have one observer make a skeleton chronological record of the role playing, so that the group can be reminded during the discussion of exactly how the role playing unfolded. Alternatively, the role-playing can be audiotaped or videotaped. Regardless, the discussion is usually enhanced if the observers take notes during the role-playing.

It is often helpful to ask the role players to pay particular attention to an aspect of the interaction during the role-playing. For example, the instructor might request, "As you play the patient, be aware of how you are feeling toward the physician assistant as she responds to you." Observing assignments for role players should be simple, and role players should not be asked to take notes, lest they be distracted from playing their roles.

Stopping the Role Playing

Stopping the role playing at an appropriate time is crucial to the success of the exercise. Allowing a role-play to go on too long is the most common mistake made by novice instructors [McKeachie]. When role-playing goes on too long, the players may feel either

stymied or lost, the observers may lose interest, the feedback is less immediate and often less accurate, and valuable discussion time is lost. The instructor must remember that the role playing itself is merely a means for generating thoughts, feelings, discussion, and conclusions.

Most roles playing exercises should not go beyond three to six minutes in length [McKeachie]. However, for certain complex clinical situations, additional time is sometimes necessary. An example might be a demonstration of a physician assistant attempting to refer a resistant substance abuser for treatment.

The Discussion

Although the role playing usually serves as a focal point of the exercise, the feedback and discussion segment is the most critical for accomplishing the educational goals of the session. Initially, it is helpful for the instructor to establish a supportive and cordial milieu by complimenting the role players' performances and by opening the floor to general comments. Once the group is interacting comfortably, the instructor should, if necessary, steer the discussion toward meeting the educational goals.

The instructor must avoid dominating the discussion. In a role playing exercise, the instructor's role is not to impart wisdom to the learners. Instead, it is to guide the discussion, allowing the learners to grapple with and solve problems related to the issues raised by the role-playing. When a group is discussing the cogent points well, the instructor need not comment at all. When a group needs direction, the instructor can be most effective by encouraging the learners to further develop a particular point that was made or by posing a question. If the instructor becomes frustrated that too little information is being conveyed, then perhaps a role playing exercise was a poor choice of teaching methods for meeting the instructor's goals.

Especially when a goal of the role-playing is to develop interactive skills, the instructor must take care to protect the role players from injurious feedback. Before a group has developed cohesion, it is helpful to direct the discussion away from the individual role players and toward the general situation [McKeachie]. Once the participants are more comfortable with each other, then the instructor can facilitate a more rigorous discussion. Nevertheless, it is important to avoid disparaging remarks about the role players' actions; instead, reinforce the difficulty of the task, point out (or better yet, have the role player or other participants point out) what did not work in a particular role playing and why, and acknowledge the role players' contributions toward everyone's learning.

Drawing Conclusions

It is important to leave time after the discussion to summarize and reinforce what should have been learned in the exercise. If the exercise was well-planned and executed, the summary should be a direct extension of the predetermined goals of the exercise.

Maintaining Order

The instructor must recognize the potential for any group to stray, intentionally or unintentionally, from the content or the process of the exercise. Thus, a goal in every role playing exercise must be to keep the learners on task. As the member of the group responsible for seeing that the educational goals are met, the instructor needs to monitor the progress of the exercise and to react accordingly. Experienced instructors agree that the concentration required for this demands as much energy as any other teaching method.

It is often challenging to achieve the appropriate balance between maintaining order and creating an open, collegial discussion. An instructor may discover in the midst of an exercise that a group wishes to pursue a goal at odds with that of the instructor. If pursuing the participants' goals will result in useful learning, it is usually wise to accede. On the other hand, it is important to enforce basic rules, such as staying in role and avoiding side discussions, for violations of these rules interfere with the attainment of all legitimate educational goals. It is easier to enforce these rules tactfully and firmly from the outset than to attempt later to overcome chaos.

Planning the Exercise

Careful planning is key to successful role playing exercises. The instructor must know his or her goals for the session, for these goals should dictate the structure of the exercise. It is helpful to write down these goals, so they can be scrutinized for appropriateness both to the participants and to the strengths of role playing exercises as a teaching modality.

The conclusions that the instructor wishes the participants to draw from the exercise should be elucidated. Learners appreciate receiving these in writing.

Scenarios should be chosen or created for their relevance to the educational goals and their ability to promote learners' interest. Clinicians' interests are piqued, and appropriate educational goals are met when the scenario depicts practical difficulties in a realistic fashion. Also, scenarios should be as simple as possible to avoid distracting the role players with superfluous details.

Written instructions for role players and observers should be reviewed by colleagues and learners well before the exercise so that the inevitable inconsistencies and ambiguities can be removed. Written instructions are preferable to verbal ones, because they are usually more precise and can be used as memory aids during the role playing.

The instructor should generate a list of points to be covered during the discussion. To be prepared for quiet or unfocused groups, it is helpful to have a list of questions for stimulating the participants or steering them to the appropriate subject matter.

VARIATIONS IN ROLE PLAYING EXERCISES

The basic elements of planning and executing role playing exercises may be adapted to fulfill requirements of particular goals or learner groups.

Smaller Groups

Role playing exercises can be conducted with as few as two learners. Both learners can play both roles, observe themselves and each other, discuss self-assessments, give each other feedback, and respond to discussion questions. If explicit instructions are provided, mature, motivated learners can gain from these exercises in the absence of a facilitator. Alternatively, a third learner can rotate service as a facilitator.

The Consultant Role

For groups with learners who may be self-conscious, or for demanding scenarios, it is helpful to include a consultant role. The learner playing the consultant may be assigned, for example, to assist another learner playing a physician assistant whose task is to assess by direct interview whether a 14-year-old girl with gonorrhea might have been sexually abused. The appointed physician assistant is instructed that he or she may call “time out” as often as needed to receive advice from the consultant. Although only the appointed physician assistant is permitted to speak directly to the appointed patient, the stress of the difficult physician assistant’s role is, in many ways, shared with the consultant.

Depicting Other Interactions

Though role playing exercises are well suited to teaching about patient-physician assistant interactions, they can also be used to spark discussion on interactions within families, between clinicians and families, and among various health care professionals. For faculty development, role playing can depict teacher-learner interactions.

Consecutive Role Playing Exercises

Consecutive role playing exercises in one session may be planned to raise several issues related to one general topic or to provide opportunities for more learners to play roles and get feedback. Instructors should leave enough time for discussion after each role playing, which can usually generate triple its time in productive discussion. Also, scenarios of consecutive role plays should be sufficiently different to prevent potentially humiliating comparisons between players of similar roles.

Simultaneous Role Playing Exercises

For this adaptation, the same scenario is enacted simultaneously by small groups within a larger group. For example, 30 learners are divided into 15 pairs who role play a patient-physician assistant interaction. Discussion can then occur within pairs or among the large group or both. This format allows the most practice of skills by and the most feedback

for all learners, including those less apt to appear before a group. Also, learners can be paired according to competence or experience, maximizing the potential for productive feedback. Discussion among the large group draws on a greater number of interactions and tends to identify a larger number of issues.

Learner-Centered Role Playing

An instructor may wish to harness through a role playing exercise the interest of learners in a real or imaginary challenging clinical case. This opportunity may arise in advance of a planned teaching session, or it may arise spontaneously during a teaching session. In contrast to the teacher-centered role playing exercise, in which the instructor chooses or creates a scenario designed to meet specific educational goals, the learner-centered role playing demands that educational goals be determined by the scenario. When a learner-centered role playing occurs without planning, the instructor should ensure that the learners identify learning objectives, usually in terms of solving clinical problems, and ultimately draw generalizable conclusions.

CONCLUSIONS

Medical educators can use role playing exercises for provoking interest and discussion on issues around human interaction and for having learners practice and gain feedback on their interactive clinical skills. Although the impromptu nature of the role playing presents an engaging focus for discussion, role playing exercises must be well planned and executed to succeed in meeting defined educational goals. Steps in executing a role playing exercise include rigorous planning, providing instructions, performing and observing the role playing, eliciting feedback and discussion, and drawing conclusions. Variations in the basic format of role playing exercises allow instructors to address diverse content goals for learner groups of different sizes and mixed levels of expertise. For mature learners, instructors can adapt role playing exercises for independent and learner-centered learning. Proficiency in role playing exercises would serve medical educators well for teaching present and future clinicians at all levels of experience or training.

(This handout was prepared for: Society of Teachers of Family Medicine (STFM), *SAEFP, Substance Abuse Education for Family Physicians*, Kansas City, MO: STFM, 1991 by Richard L. Brown, MD, MPH, University of Wisconsin.)

Reference: McKeachie WJ. *Teaching Tips: A Guidebook for the Beginning College Teacher*, 8th ed. Lexington, Mass.: D. C. Heath, 1986, pp174 - 178.

Module III Screening and Assessment

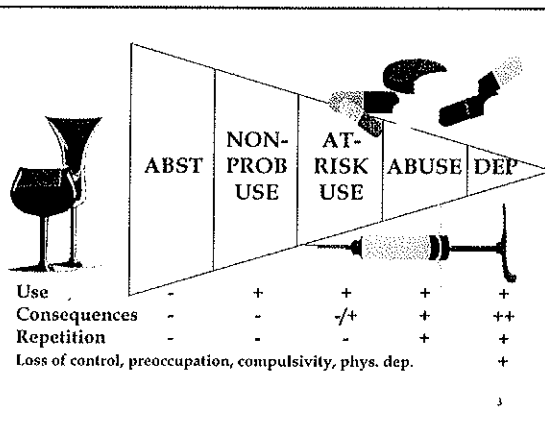


Project MAINSTREAM
Draft - 10/05

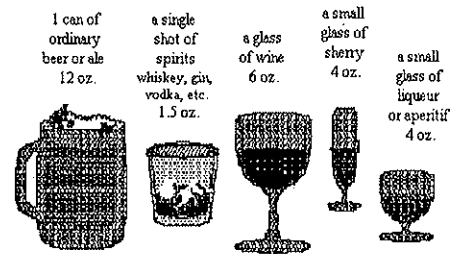
Learning Objectives

Health Care Professionals will be able to:

- ◆ Describe substance use continuum
- ◆ Cite data on the effectiveness of screening
- ◆ Choose screening instrument
- ◆ Screen and assess
- ◆ Teach others

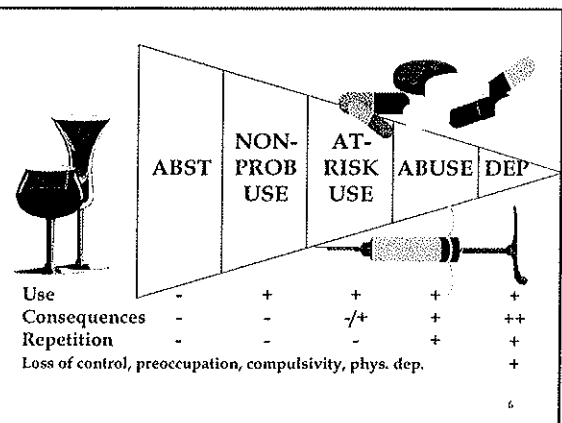


Standard Drink



At-Risk Drinking

	<u>Per Week</u>	<u>Per Occasion</u>
Men	≥14 drinks	≥5 drinks
Women	≥11 drinks	≥3 or 4 drinks
Elders	>7 drinks	>1 drink

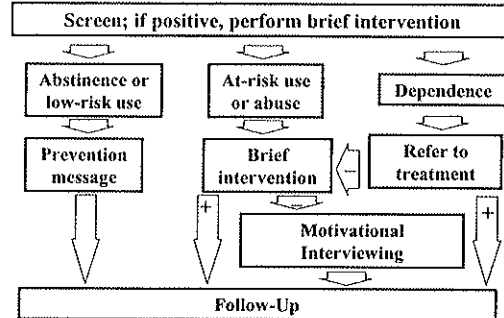


Rationale for Generalist Care

- ◆ Risky and problematic substance use is common in our settings
- ◆ Most affected people receive no intervention or treatment
- ◆ Early identification and intervention can prevent adverse effects, improve other health outcomes, and save money

7

Generalist Care for Substance Use & Related Disorders



8

Evidence on Screening

- ◆ Screening instruments are usually tested by concurrent validity
- ◆ Screen is compared to a “gold standard” criterion measure
- ◆ “Gold standard” is usually a lengthy diagnostic interview

9

Evidence on Screening (continued)

Screen	Diagnostic Interv.		Total
	+	-	
+	True Pos	False Pos	TP + FP
-	False Neg	True Neg	FN + TN
Total	TP + FN	FP + TN	<i>N</i>

10

Evidence on Screening (continued)

Screen	Diag. Int. +	Diag. Int. -	Total
+	True Pos	False Pos	TP + FP
-	False Neg	True Neg	FN + TN
Total	TP + FN	FP + TN	<i>N</i>

Sensitivity = True Pos / (TP+FN)

Of those who truly have a disorder, what proportion has a positive screen?

11

Evidence on Screening (continued)

Screen	Diag. Int. +	Diag. Int. -	Total
+	True Pos	False Pos	TP + FP
-	False Neg	True Neg	FN + TN
Total	TP + FN	FP + TN	<i>N</i>

Specificity = True Neg / (FP+TN)

Of those who truly do not have a disorder, what proportion has a negative screen?

12

Evidence on Screening (continued)

Screen	Diag. Int. +	Diag. Int. -	Total
+	True Pos	False Pos	TP + FP
-	False Neg	True Neg	FN + TN
Total	TP + FN	FP + TN	N

Positive Predictive Value = $TP / (TP+FP)$

Of those who have a positive screen, what proportion has a disorder?

13

Evidence on Screening (continued)

Screen	Diag. Int. +	Diag. Int. -	Total
+	True Pos	False Pos	TP + FP
-	False Neg	True Neg	FN + TN
Total	TP + FP	FP + TN	N

Negative Predictive Value = $TN / (FN+TN)$

Of those who have a negative screen, what proportion does not have a disorder?

14

Evidence on Screening (continued)

- ◆ Higher PPV - Less False Negatives
Less people with disorders missed
- ◆ Higher NPV - Less False Positives
Less time spent on assessments for people without disorders

15

Evidence on Screening (continued)

Screen	DI+	DI-	Total	
+	45	190	140	Prev = 50/1000 = 0.05
-	5	760	860	Sens = 45/50 = 0.90
Total	50	950	1000	Spec = 760/950 = 0.80
				PPV = 45/140 = 0.32
				NPV = 760/860 = 0.88

Screen	DI+	DI-	Total	
+	180	160	340	Prev = 200/1000 = 0.20
-	20	640	660	Sens = 180/200 = 0.90
Total	200	800	1000	Spec = 640/800 = 0.80
				PPV = 180/340 = 0.53
				NPV = 640/660 = 0.97

Evidence on Screening (continued)

- ◆ Higher prevalence of disorder:
Higher % of positive screens are true positive
- ◆ Lower prevalence of disorder:
Higher % of positive screens are false positive

17

Barriers to Involvement

- ◆ Not seen in purview of profession
- ◆ Stereotypes; most experience with most severely affected individuals
- ◆ Pessimism
- ◆ Stigma and discomfort
- ◆ Early disorders manifest few clues
- ◆ Deficient knowledge and skills
- ◆ Time and inadequate reimbursement

18

Definition of Screening

Procedure to recognize individuals with a disorder before obvious manifestations of the disorder are apparent.

Examples:

Cancer and depression

19

Choose Screens By ...

- ◆ Number of items
- ◆ Method of administration
- ◆ Substances covered
- ◆ Accuracy by age group, gender, pregnancy status, ethnic group

20

AUDIT

- ◆ 12 questions - multiple choice
- ◆ Administered in writing
- ◆ Alcohol only
- ◆ Screens for at-risk drinking, abuse, and dependence
- ◆ Accurate across many cultures/nations
- ◆ Sens: 51% - 97% Spec: 78% - 96%

21

CAGE

- ◆ 4 yes/no questions (1 yes = positive)
- ◆ Administered by interview
- ◆ Alcohol only
- ◆ Screens for abuse and dependence
- ◆ Add quantity and frequency questions to screen for at-risk drinking
- ◆ Sens: 43% - 94% Spec: 78% - 96%

22

CAGE-AID

- ◆ 4 yes/no questions (1 yes = positive)
- ◆ Administered by interview
- ◆ Alcohol and drugs
- ◆ Screens for abuse and dependence
- ◆ Add quantity and frequency questions to screen for at-risk use
- ◆ Sens: 79% Spec: 77%

23

CRAFFT

- ◆ 6 yes/no questions (weighted score)
- ◆ Administered by interview
- ◆ Alcohol and drugs
- ◆ Validated for adolescents
- ◆ Sens: 92% Spec: 82%

24

SMAST-G

- ◆ 10 yes-no items
- ◆ Administered by questionnaire
- ◆ Covers alcohol only
- ◆ Validated for ages 55 to 81
- ◆ Sens: 89% Spec: 72%

25

DAST

- ◆ 28 questions
- ◆ Administered by questionnaire
- ◆ Covers drugs only
- ◆ Validated and most useful for inpatients

26

Trauma Questions

- ◆ 5 questions on trauma, including one question on trauma after drinking
- ◆ Administered by questionnaire
- ◆ Covers alcohol only
- ◆ Sens: 45% - 53% Spec: 80% - 93%

27

TWEAK

- ◆ 5 questions
- ◆ Administered by interview
- ◆ Covers alcohol only
- ◆ Screens for abuse and dependence for pregnant women
- ◆ Sens: 59% - 87% Spec: 72% - 94%

28

Two-Item Conjoint Screen

- ◆ 2 yes/no questions (1 yes = positive)
- ◆ Administered by interview
- ◆ Covers alcohol and drugs
- ◆ Screens for abuse and dependence
- ◆ Add quantity and frequency questions to screen for at-risk use
- ◆ Sens: 81% Spec: 81%

29

Q/F Questions on Alcohol

- ◆ How many days a week do you drink some alcohol?
- ◆ How much do you typically drink when you do drink?
- ◆ What's the most you've had to drink at one time in the past 3 months?

30

Other Questions to Consider

- ◆ Have you ever tried or experimented with:
 - Marijuana? - Inhalants?
 - Cocaine? - Pills?
 - Shooting Up? - Any other drugs?
- ◆ Days per week, usual quantity, maximum
- ◆ Have you ever gotten any help for an alcohol or drug problem?

31

Transitions to Screening

- ◆ Routine questions
- ◆ Tie into pt's/client's concern
- ◆ Questions on preventive health
- ◆ Family medical or social history
- ◆ Diet history
- ◆ Leisure activities
- ◆ Stresses and ways of coping

32

Sample Adult Screening Protocol

- ◆ Transition: Stresses and ways of coping
- ◆ "Do you drink alcohol?"
- ◆ "Have you ever experimented with any drugs?"
- ◆ Ask CAGE or CAGE-AID questions
- ◆ Ask Q/F questions on alcohol

Usually takes less than one minute

33

Non-Verbal Cues

Interpret significant changes in a patient's/client's non-verbal cues as a positive screen for abuse or dependence:

- ◆ Eye contact
- ◆ Fluidity and tone of speech
- ◆ Posture
- ◆ Movements
- ◆ Affect

34

For Especially Sensitive Situations

- ◆ Ask about friends first
- ◆ Ask about prior use first
- ◆ Make normalizing statements before asking questions

35

Screen Results and Actions

- | | |
|---|--------------------|
| ◆ Abstinence or low-risk drinker | Prevention message |
| | |
| ◆ At-risk drinker or drug user with otherwise negative screen | Brief intervention |
| | |
| ◆ Positive screen for abuse or dependence | Brief assessment |

36

Prevention Messages

- ◆ Brief
- ◆ Relevant information
- ◆ Culturally appropriate
- ◆ Reinforcing

37

Compose a Prevention Message

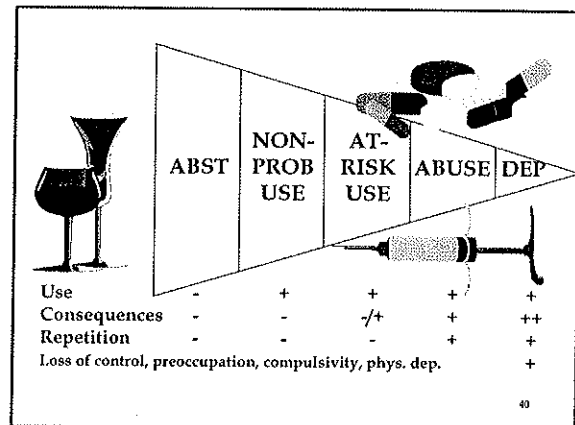
- ◆ 22-year-old unmarried pregnant woman
- ◆ Abstains from all substances
- ◆ Lives with sister who smokes cigarettes and marijuana

38

Compose a Prevention Message

- ◆ 35-year-old male
- ◆ Parents are alcohol dependence
- ◆ Coworkers often drink after work
- ◆ Avoids most work parties
- ◆ Drinks very rarely

39



40

Definition of Assessment

A process intended to identify precisely the category of substance use on the continuum

41

Assessment Tools

- ◆ Alcohol levels and drug tests
- ◆ Tests for excessive alcohol use - liver function tests, blood counts
- ◆ Physical examination
- ◆ Collateral report
- ◆ Self-report

42

Alcohol and Drug Tests

- ◆ Show use, not abuse or dependence
- ◆ Poor sensitivity and specificity for substance use disorders
- ◆ Show use in past few hours to 3 days
- ◆ Expensive
- ◆ Easily circumvented by sophisticated individuals

43

LFT's and CBC's

- ◆ Elevated LFT's, macrocytosis can suggest excessive alcohol use
- ◆ Sensitivity $\leq 25\%$; most affected individuals have normal tests
- ◆ Positive tests can have other explanations
- ◆ If present, abnormalities are helpful

44

Physical Examination

- ◆ Most findings occur only with late, severe disorders
- ◆ Most individuals with disorders have no findings
- ◆ If present, findings are helpful
- ◆ If absent, do not rule out disorder

45

Collateral Report

- ◆ Collateral report is often less than self-report
- ◆ Surreptitious collateral report can hinder trusting relationship

46

Self-Report

- ◆ Interview is usually the most accurate source of information
- ◆ Accurate assessment is usually possible even with minimization
- ◆ Appropriate assessment techniques can build rapport

47

Brief Assessment Interview

- ◆ Consequences and repetition
- ◆ Physical dependence and loss of control
- ◆ Quantity and frequency

48

Later Consequences

- ◆ Cirrhosis, cardiomyopathy, AIDS, chronic pancreatitis, CAD, cancer
- ◆ Severe neuropsychiatric disorders
- ◆ Family dissolution, social isolation
- ◆ Unemployment, homelessness
- ◆ Incarceration
- ◆ Oral cancers and tooth loss

49

Earlier Consequences

Identify problem before irreversible consequences:

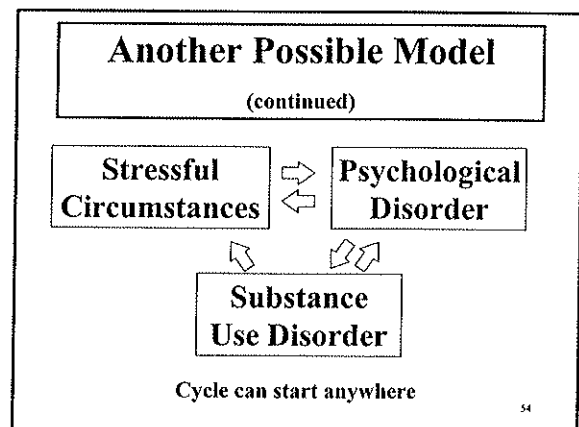
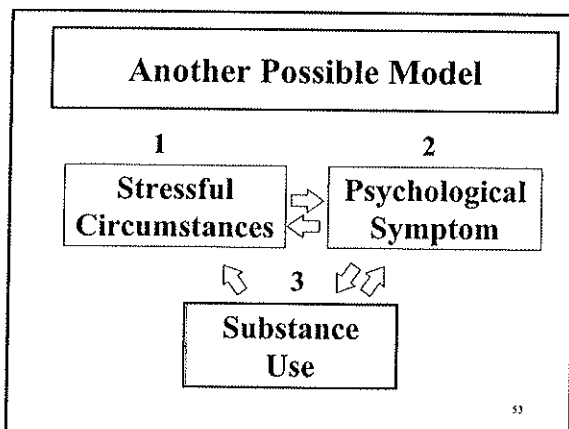
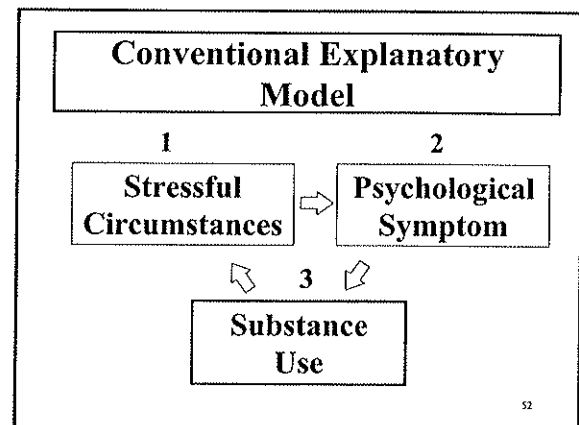
<ul style="list-style-type: none"> ◆ Psychological ◆ Family ◆ Friends ◆ Biomedical 	<ul style="list-style-type: none"> ◆ Work ◆ Legal ◆ Financial
--	--

50

Early Consequences: *Psychological*

- ◆ Earliest category of consequences
- ◆ Dysphoria, depression, or anxiety
- ◆ Irritability, mood swings, hostility
- ◆ Paranoia, psychosis
- ◆ Any psychiatric symptom can be related to intoxication, overdose, or withdrawal

51



“Dual Diagnosis”

- ◆ Co-existing substance use disorder and another psychiatric disorder
- ◆ Identify primary and secondary disorder, if possible
- ◆ If SUD may be primary, and if psychiatric symptoms are not pressing, try abstinence without medications

55

Early Consequences: *Family*

- ◆ Marital/family dysfunction
- ◆ Childhood behavior/school problems
- ◆ Mental health problems and somatic symptoms among family members

56

Early Consequences: *Friends*

- ◆ Alienation and loss of old friends
- ◆ Gravitation toward others who use substances heavily

57

Early Consequences: *Biomedical*

- ◆ Gastritis, peptic ulcer, pancreatitis, vague abdominal pain, diarrhea
- ◆ Hypertension
- ◆ Weight gain for alcohol
- ◆ Weight loss for cocaine and amphetamines
- ◆ Accidents and injuries
- ◆ Sleep and sexual dysfunction
- ◆ Unplanned pregnancies, unwanted sexual advances, STD's
- ◆ Periodontal disease

58

Early Consequences: *Work/School*

- ◆ Frequent lateness and absences
 - ◆ Requests for work excuses
 - ◆ Decline in performance
 - ◆ Frequent job changes
- Preservation of function for highly motivated individuals, such as many health care professionals*

59

Early Consequences: *Legal*

- ◆ Domestic and other violence
- ◆ Arrests for disturbing the peace
- ◆ DWI's / DUI's
- ◆ Arrests for possession and dealing
- ◆ Burglary, robbery

60

Early Consequences: *Financial*

- ◆ Spending more than one can afford on obtaining substances
- ◆ Financial strain
- ◆ Indebtedness
- ◆ Selling possessions

61

Brief Assessment Interview

- ◆ Consequences and repetition
- ◆ Physical dependence and loss of control
- ◆ Quantity and frequency

62

Brief Assessment Interview (continued)

Loss of control

- ◆ Setting rules about substance use
- ◆ Having difficulty adhering to rules

Physical dependence

- ◆ Withdrawal symptoms
- ◆ Substance use to avoid withdrawal

Tolerance

63

Brief Assessment Interview (continued)

- ◆ Consequences and repetition
- ◆ **Physical dependence and loss of control**
- ◆ Quantity and frequency

64

Brief Assessment Interview (continued)

- ◆ How many days a week do you drink some alcohol?
- ◆ How much do you typically drink at one time when you do drink?
- ◆ What's the most you've had to drink at one time in the past 3 months?

Take responses at face value

65

For Patient/Client Discomfort

- ◆ Change topic and ask again later
- ◆ Ask more about social context and establish more rapport
- ◆ Ask about discomfort and request cooperation
- ◆ Explain need for questions

66

Summary

- ◆ Screening and assessment works
- ◆ All generalist health professionals should screen and assess for substance use and related disorders
- ◆ Use appropriate screen for setting
- ◆ For positive screens, assess: consequences, dependence, Q/F

67