8 Prevention, Evaluation, and Assessment

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Learning Objectives

1. Distinguish among universal, selective, and indicated prevention.
2. Compare and contrast risk factors versus protective factors.
3. Learn about prevention interventions through legislation; individual-, parental-, and community-focused interventions; and mass media.
4. Discern the differences among prevention evaluation, program evaluation, and treatment evaluation.
5. Discover ways to evaluate your own effectiveness and outcome for your clients.

PERSONAL REFLECTIONS

When I was still married to my wife, we would read our son and daughter children's books that taught values (see https://www.trueaimeducation.com/abcs-of-values-for-children/ for an example). We hoped that these books would act in a preventative way by teaching valuable lessons when they were most suggestible to learning. They both turned out to be amazing people (I am sure most parents would say this of their adult children). Nevertheless, how could we ever prove that it was reading these bedtime stories that made the difference? What other factors may have explained the positive results? I knew then that a prevention program would need to be evaluated systematically if we wanted to establish a correlational or causal relationship.

When I oversaw a large counseling and health services center at a local community college, I introduced an evaluation that students would complete yearly as they were leaving their counseling session. The questions would ask about their counseling experience and whether their needs were met. I used a 5-point Likert scale with anchors from 1 (*poor*) to 5 (*excellent*). The average rating was a 4, which meant very good. These results would be provided to the administration with the intent that we could use our success to both maintain our existence and increase the size of our department.

Numbers, however, were ineffective in helping administration see the importance of student counseling. I then introduced a qualitative evaluation component. Students would now write a sentence that described their experience of counseling. Some examples of these might be, "My counselor saved my life. I was thinking of suicide before I met with her," or "He really helped me overcome my exam anxiety. My marks have increased substantially thanks to him." Comments like these were received especially well by the administration, and, on more than one occasion, I heard an administrator use some of these comments in a public forum.

This chapter is about prevention, evaluation, and assessment. I hope you enjoy reading this chapter as much as I did writing it.

Prevention

The next 11 chapters review the most current information we have regarding common addictions. What if we could prevent addictions from developing in the first place? Given the enormity of the costs associated with addiction that are outlined in the subsequent chapters, prevention should arguably be the highest priority. As Metzler, Eddy, and Lichtenstein (2013) stated, "The potential benefit to individuals, families, and communities, preventing the development of disorders and the benefit to society of reducing the prevalence of these costly problems cannot be overstated" (p. 839). Once addiction occurs, between 80% and 90% of individuals entering addiction treatment relapse during the first year (Kwon, 2011). Addiction for many, perhaps most, individuals is a chronic relapsing condition.

Nearly 80% of juveniles were under the influence of psychoactive drugs when they committed crimes in the United States (Finn, 2012). The cost to America is in the billions of dollars annually when one considers lost productivity and absences from work and costs associated with social service organizations, the criminal justice system, law enforcement, and healthcare costs (Finn, 2012). The National Institute on Drug Abuse (2017) estimated the annual cost in the United States to be more than $740 billion!

The old cliché "an ounce of prevention is worth a pound of cure" makes intuitive sense, but does it hold up under scrutiny? This section provides an overview of the various forms of prevention.

An early but widely accepted model of prevention distinguished among three types: primary, secondary, and tertiary prevention (Smith & Luther, 2013). Primary prevention focused on those with little or no experience with a particular form of addiction, secondary prevention targeted both novices and experienced users who were showing potential signs of addiction, and tertiary prevention was aimed at those eliciting more advanced stages of abuse and/or addiction.

Gordon (1983) wrote about a different classification scheme that has subsequently become more popular. In Gordon's classification, there are again three types: universal, selective, and indicated prevention. *Universal prevention* targets the general population, *selective intervention* focuses explicitly on at-risk populations, and *indicated prevention* is aimed at those experiencing early signs of substance abuse and related problem behaviors. The Institute of Medicine (1994) recommended the use of Gordon's classification, and it has been adopted by the National Institute on Drug Abuse (2003a).

Combining methods into a comprehensive multimodal approach has demonstrated the greatest impacts on reducing drug and alcohol use. Some of these programs have found lasting results 15 years after program delivery (Finn, 2012; Smith & Luther, 2013).

The Center for Substance Abuse Prevention (CSAP) falls under the auspices of the Substance Abuse and Mental Health Services Administration (SAMHSA). That is the federal agency that coordinates prevention efforts made across the country (Fisher & Harrison, 2013). It lists six strategies that can be targeted at the universal, selective, or indicated population level.

1. Information dissemination. This strategy is focused on providing information regarding substance use, abuse, and addiction.
2. Education. The focus here is on building or changing life and social skills such as decision-making, refusal skills, and assertiveness.
3. Alternatives. This strategy attempts to develop activities that are incompatible with substance use, such as providing "midnight basketball" (Fisher & Harrison, 2013, p. 318). Promoting leisure for young people, in general, has a positive effect on preventing addictive behaviors (Lacsan, Arany, & Farkas, 2017).

4. Problem identification and referral. This focuses on targeting populations that are at risk.
5. Community-based processes. These strategies include mobilizing communities to provide prevention services.
6. Environmental approaches. This includes changing written and unwritten norms, codes, laws, and attitudes that affect the development of addictions.

Although these six strategies are not addressed explicitly in this chapter, they are provided here for the interested reader who may be designing a prevention program. Nonetheless, programs can be classified according to whether they target universal, selective, or indicated communities, or they could be classified according to the six CSAP strategy types.

WHAT MIGHT YOUR PREVENTION PROGRAM LOOK LIKE?—PART I

Consider the six strategies listed by the CSAP previously (i.e., information dissemination, education, alternatives, problem identification and referral, community-based approaches, and environmental approaches). Decide on a specific addiction for which you will design a prevention program (see the names found in Chapters 9–21 for a list). Now decide upon the age bracket that you will target with your program and other important delimiters (e.g., for middle-school boys, for high school students at my church). Write down the primary goal of your program (i.e., abstinence, reduction in use, harm reduction). Now beside each of the six strategies, write one idea that you could implement that might have an impact on your chosen addiction. We will add to this in the next exercise (i.e., Part II).

Cultural Considerations

Before looking at universal, selective, and indicated prevention, you must consider the impact of culture (Antone & Csiernik, 2017[1]). Culture dictates what is considered required, forbidden, acceptable, and unacceptable behaviors of its members, and this is also evident in substance use and other potentially addictive behaviors. Consequently, prevention efforts need to be culturally sensitive if they are to be accepted and effective within a culture. Embedded within cultural considerations are also potential prevention ideas regarding protective factors and risk factors.

Family and one's upbringing play a substantial role in creating and upholding values, beliefs, and attitudes toward substances and addictive behaviors. For example, it is established that, if abstinence is the prevailing attitude, children and adolescents are more likely to embrace sobriety themselves. Despite the rhetoric concerning adolescent crises and such, most adolescents do care about their parents' values, beliefs, and attitudes (Antone & Csiernik, 2017). Nonetheless, peer influence does increase during adolescence (Antone & Csiernik, 2017).

Risk Factors

Risk factors increase the likelihood that individuals will become either users or addicts. Preceding addiction, five categories have been discussed in the literature: (a) individual characteristics (e.g., mental illness, school failure, antisocial behavior, criminal activity, early age of onset regarding drug use), (b) attitude factors (e.g., distrust of authority figures, anger toward parents and other adults, and enjoying acting defiantly), (c) psychosocial factors (e.g., low self-esteem, having poor social skills, wanting to fit in with peers), (d) family characteristics (e.g., family history of drug use, familial antisocial behavior), and (e) environmental characteristics (e.g., poverty, community acceptance of drug use, easy access to drugs and alcohol) (Finn, 2012).

Risk factors are evident in Indigenous communities. Colonization by White settlers led to high rates of substance abuse among First Nation individuals. This is partly attributed to the Native American boarding schools (also referred to as Indian Residential Schools) that were designed to assimilate Native Americans into White American culture.

Another risk factor is having excessive drinking norms. Men in Serbia and Russia, for example, drink large amounts of alcohol as one way of exhibiting masculinity (Antone & Csiernik, 2017). In countries like Saudi Arabia, alcohol prohibition is enforced, so drinking norms are the complete opposite.

Protective Factors

Protective factors help insulate individuals from becoming either users or addicted individuals (e.g., being resilient, having strong family support). More research is needed to establish whether teaching resilience-related skills is effective in lowering drug use with youth (McNeece & Madsen, 2012). Research does indicate that more-resilient individuals are less likely to become Internet-addicted individuals (Robertson, Yan, & Rapoza, 2018).

Strongly identifying with one's culture or ethnicity can be a protective factor. This is true of Asian Americans, African Americans,

[1]This section will focus primarily on the writing of Antone and Csiernik (2017).

Mexican Americans, Puerto Ricans, and American Jewish individuals. The importance of family regarding prevention is strongly evident in Latino culture. The Latino concept of "familismo" is characterized by three qualities: (a) strong attachment and identification among nuclear and extended families, (b) interdependence and unity in the family, and (c) high levels of social support offered by family members (Antone & Csiernik, 2017). Other features of familismo include having a strong sense of family loyalty, solidarity, and reciprocity. When these aspects of familismo are combined, numerous studies have demonstrated the protective impact that parental monitoring, family commitment, and cohesion have in Latino families (Antone & Csiernik, 2017).

In Asian cultures, the concept of familial piety (i.e., obedience to parents, provision of both financial and emotional support, and avoiding disgraceful behavior that is believed to impact family honor and respect) acts as a protective factor against addictive behavior (Antone & Csiernik, 2017). African American communities are highly interdependent with high degrees of social control and norms of abstinence. Strong Christian values and beliefs are typically present in African American communities, and a substantial body of research has shown that religion and spirituality are protective factors (Antone & Csiernik, 2017). For example, students who report religion as important to them are more likely to abstain from alcohol and other drugs compared to those with no religious affiliation (Antone & Csiernik, 2017).

WHAT MIGHT YOUR PREVENTION PROGRAM LOOK LIKE?—PART II

Now return to your list of six strategies that you wrote for Part I. From the results of the previous meta-analysis noted by Metzler et al. (2013; e.g., interactive, cognitive-behavioral, or behavioral), now add to your strategies based on these findings. For example, assume that in Part I you chose "work addiction" and beside "information dissemination" you wrote, "Provide information about what distinguishes work addiction from working hard because of passionate interest." Now include how you could interactively deliver that information. Is there a way to add in a cognitive-behavioral component by introducing some of the cognitions (thoughts) that work-addicted individuals tell themselves? How does media affect people's attitudes toward work? Is there a way to include peer leaders in delivering your message? Use what you can from the meta-analysis for each of the six strategies. You have now built the rudiments of a prevention program!

Universal Prevention

Public Policy and Legislative Interventions

Government intervention can play a substantial role in assisting prevention efforts. As Warner (as cited in Brownell & Gold, 2012) stated, "The rise and fall of smoking during the twentieth century may well prove to be one of the most significant, and fascinating, stories in the history of public health" (p. 442). The rise and fall of smoking in the United States had a great deal to do with prevention efforts and legislation enacted by the government (Brownell & Gold, 2012).

The following is an itemized compilation regarding government efforts that promote prevention and/or harm reduction (see Polcin, 2014, for a list of strategies that counselors can use to influence policies at both national and local community levels).

1. Require manufacturers to reduce addictive drug potential. This could be achieved by requiring (a) cigarette makers to produce lighter brands that are low in nicotine and tar content, (b) manufacturers of distilled spirits, beers, and wines to reduce the percentage of alcohol in their products, and (c) cannabis producers in Canada to produce products with low THC and high CBD content (see Chapter 10) (McNeece & Madsen, 2012).
2. Introduce ignition interlock device legislation for individuals convicted of driving under the influence. These devices require the offender to provide breath samples for the vehicle to start (McNeece & Madsen, 2012). Research has shown that they do reduce alcohol-impaired driving recidivism (Voas, Tippetts, Bergen, Grosz, & Marques, 2016).
3. Legislate stricter enforcement of drug laws. Examples include laws banning minors from using alcohol and nicotine products (already done throughout the United States) and setting up random checkpoints where police officers stop drivers suspected of impaired driving.
4. Require offenders to receive counseling or to attend a program for repeat offenders. This is required for impaired drivers in some states. Juvenile drug courts (JDCs) are another strategy that targets youth who are using drugs. Parole officers closely supervise juveniles in the program. Furthermore, the minors are subjected to periodic drug testing. They are also provided psychological help. JDCs are considered more humane than incarceration, and they are cost-beneficial. Incarcerating youth in 2004 cost about $43,000 per year, whereas the JDC program costs $5,000 per year (Finn, 2012).

5. Require bartenders not to serve intoxicated persons. These are sometimes referred to as "dram shop laws" (McNeece & Madsen, 2012, p. 185).
6. Increase taxes on legal drugs, including alcohol and nicotine products. For example, research has shown that increased prices result in a reduction in the use of alcohol (McNeece & Madsen, 2012). Increasing the price of alcohol also decreased gonorrhea rates by 24% in one study (Staras, Livingston, & Wagenaar, 2016)!
7. Increase the legal age for consuming legal drugs, including alcohol and nicotine products. Although the legal drinking age in the United States is 21, it is only 16 in Germany, Portugal, and Poland, and another 17 countries have no minimum age (McNeece & Madsen, 2012). Lower drinking ages are associated with increased automobile accidents among young people (McNeece & Madsen, 2012). It is illegal for individuals under 18 years of age to use tobacco products (Fisher & Harrison, 2013).
8. Lower the maximum acceptable blood alcohol content (BAC) levels for drivers. The current maximum BAC permissible for drivers in the United States is 0.08 (McNeece & Madsen, 2012).
9. Ban legal drug products that increase abuse potential. This could include banning cigarettes that have fruity or other pleasant flavors (McNeece & Madsen, 2012). In Canada, this could include banning cannabis products such as gummy bears and brownies containing THC.
10. Require health warnings to be placed on alcohol and tobacco products. Such warnings have already been mandated (McNeece & Madsen, 2012).
11. Legislate against the tobacco and alcohol lobby. McNeece and Madsen (2012) reported that the top three distributors for alcohol (i.e., National Beer Wholesalers Association, Anheuser-Busch, and the Wine and Spirits Wholesalers of America) contributed more than $14.5 million in donations and the top three tobacco companies (i.e., Philip Morris [a subsidiary of ALTRIA], Reynolds American, and U.S. Smokeless Tobacco) donated over $17 million to state and federal groups during the 2007–2008 election cycle. During the same election, tobacco companies contributed over $2 million directly to federal candidates. Donations accepted by both candidates and government from these companies can negatively impact legislative decisions targeted at reducing alcohol and tobacco use (Fisher & Harrison, 2013; McNeece & Madsen, 2012).
12. Restrict advertising of legal drugs. In 2016, tobacco companies in the United States alone spent $9.5 billion on advertising and promotion (Centers for Disease Control and Prevention, 2018), and, in 2011, alcohol companies reported $3.45 billion in marketing expenditures (Federal Trade Commission, 2014). There is currently inadequate evidence, however, regarding the effect of alcohol advertising on consumption among heavy drinkers (Stautz, Frings, Albery, Moss, & Marteau, 2017).
13. Promote anti-drug use media campaigns. This can include advertisements that educate viewers regarding the harmful effects of nicotine products, excessive alcohol use, cannabis, and other drugs. This also includes designated-driver publicity campaigns (Fisher & Harrison, 2013).
14. Ban tobacco use in workplace settings and other public environments. For example, in 2015, only 16 states still allowed smoking in bars and restaurants (Huston, 2015).
15. Establish stricter guidelines for prescribing opioid medications. Many opioid-addicted individuals were first introduced to opioids through prescriptions for pain management (Cicero, Ellis, & Kasper, 2017; Rastegar & Fingerhood, 2016).
16. Legislate national screening days. Young (2017) recommended that the United States adopt national screening days regarding Internet addiction following the lead of Korea. National screening days could be introduced for other addictions as well.

In some instances, government intervention is ineffective in curbing drug use. Federal attempts to decrease the illegal drug supply, for example, have mostly increased the prices of street drugs and the profits for drug dealers (McNeece & Madsen, 2012). Instead of reducing drug use for those who are addicted, these legislative attempts have increased the crime rate because of the increased cost, and little change in drug use patterns has occurred (McNeece & Madsen, 2012). Conversely, it is true that criminals are likelier to be heavier drug and alcohol users than the general public (McNeece & Madsen, 2012).

Reducing the hours of operation of establishments that sell alcohol has not proven effective in reducing its consumption. In fact, Sunday closing laws increased sales (McNeece & Madsen, 2012).

Community-Based Interventions

Community-based interventions focus on changing "community systems" that pertain to substance abuse (Treno & Lee, 2013, p. 871). Changing community systems can involve attempts to change formal institutions (e.g., reduce hours in efforts to reduce consumption) and informal systems (e.g., breaking up drug markets) (Treno & Lee, 2013). Many evidence-based prevention programs for alcohol and drug use have proven effectiveness (Metzler et al., 2013). Two of the projects described by Treno and Lee (2013) to reduce and prevent alcohol problems are

1. **The Saving Lives Project**. This Massachusetts program was designed primarily to decrease the number of alcohol-impaired drivers. The program included a range of activities such as media campaigns, information programs delivered to businesses, awareness days for speeding and drinking, telephone hotlines, police training, peer-led education in high schools, the inclusion of Students Against Drunk Driving chapters, and prevention programs in colleges.

   The program produced favorable results, including a reduction in fatal crashes (25%–42%) and a 47% reduction in the number of fatally injured drivers who had

consumed alcohol. There was also an 8% reduction in the number of accidents among 15- to 25-year-olds.

2. **Communities Mobilizing for Change on Alcohol (CMCA) Project**. This project was conducted in Minnesota and western Wisconsin. It intended to make alcohol less available to youth under the age of 21 years. The program focused on several components, including creating community policies, engaging in community practices, making alcohol less accessible to youth, reducing youth alcohol consumption, and reducing the number of youth alcohol problems. Youth who were 18- to 20-year-olds were contacted by telephone and participants reported fewer attempts to purchase alcohol, reduced use of alcohol, and reduced likelihood of providing alcohol to other adolescents. The study also reported more infrequent drinking and driving arrests among 18- to 20-year-olds and a reduction in disorderly conduct violations among 15- to 17-year-olds.

Other effective projects focused on reducing and preventing alcohol problems include the Community Trials Project (Holder et al., 2000), the Sacramento Neighborhood Alcohol Prevention Project (Treno, Gruenewald, Lee, & Remer, 2007), the Operation Safe Crossing Project (Voas, Tippetts, Johnson, Lange, & Baker, 2002), and the Safer California Universities Project (Saltz, Paschall, McGaffigan, & Nygaard, 2010).

The National Institute on Drug Abuse (2003d) also lists 10 universal programs on its website (for details, visit https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-4-examples-research-based-drug-abuse-prevention-progr-0): (a) Caring School Community Program, (b) Classroom-Centered (CC) and Family-School Partnership (FSP) Intervention, (c) Guiding Good Choices (GGC), (d) Life Skills Training (LST) Program, (e) Lions-Quest Skills for Adolescents (SFA), (f) Project ALERT, (g) Project STAR, (h) Promoting Alternative Thinking Strategies (PATHS), (i) Skills, Opportunity, and Recognition (SOAR), and (j) the Strengthening Families Program: Four Parents and Youth 10-14 (FSP 10-14).

Metzler et al. (2013) provided examples of top evidence-based programs focused on children. The authors used several criteria for screening, including (a) the program is preventive and not treatment-focused, (b) focus on developing competencies in children/youth or their parents, (c) evidence provided they reduce levels of future substance use during adolescence or later, and (d) meets at least two of four "best practices" lists; this list includes being rated as a model or promising program, rated as proven or promising for outcomes and substance use or externalizing behaviors, included in the report of the National Research Council and Institute of Medicine, or had a positive cost-to-benefit ratio in reports by Aos and colleagues (as cited in Metzler et al., 2013). Each program selected included home visits during pregnancy and infancy, parenting skills offered during their child's childhood and adolescence, and/or school-based programs. Their list consists of 19 programs that met their criteria, as noted in Table 8.1.

TABLE 8.1 Child/Youth-Based Prevention Programs That Are Evidence-Based Described in Metzler et al. (2013)

1. Triple P-Positive Parenting Program.
2. Nurse-Family Partnership (NFP).
3. Raising Healthy Children (RHC).
4. Linking the Interests of Families and Teachers (LIFT).
5. Incredible Years Series.
6. Fast Track.
7. Good Behavior Game.
8. Promoting Alternate Thinking Strategies (PATHS).
9. Carolina Icebedarian Project.
10. Strengthening Families Program for Parents and Youth 10–14.
11. Families That Care: Guiding Good Choices.
12. Ecological Approach to Family Intervention and Treatment (EcoFIT).
13. Strong African American Families.
14. Life Skills Training.
15. Big Brothers Big Sisters of America.
16. Brief Alcohol Screening and Intervention for College Students (BASICS).
17. Alcohol-Related Cognitive-Behavioral Skills Training.
18. Alcohol-Related Social Norms Re-Education.
19. Alcohol-Related Expectancy Challenge.

Programs targeted at athletes and mandated students have not demonstrated positive results. However, programs aimed at first-year students, fraternity/sorority members, and those who report heavy drinking on screening tests have shown promise (Metzler et al., 2013).

Metzler et al. (2013) noted that the biggest problem with the evidence-based studies that they described is the lack of replication of findings. Most of the studies have been small-scale and suggest *promising* results instead of *definitive* conclusions. Many of the studies have also been conducted by the same investigator, a factor that may bias the results. Evidence-based programs have neither been widely implemented nor maintained in community and school settings. Furthermore, there is little evidence that the interventions are effective for diverse populations. The programs have limited reach, especially those that involve parents, and this continues to create a barrier for widespread participation in prevention programs.

Fisher and Harrison (2013) surmised that the effectiveness of prevention efforts would increase if contradictory messages were decreased. It is difficult "to counteract creative and funny beer commercials, cigarette smoking and youth-oriented movies, and mom and dad smoking a joint with their friends in the living room" (Fisher & Harrison, 2013, p. 321).

Unsurprisingly, not all programs are effective. For example, Drug Abuse Awareness and Resistance Education (DARE) is a well-known program offered in schools. Researchers found, however, that the program had only a minimal effect on preventing drug use in adolescence and that the initial positive effects decayed over time (Finn, 2012). DARE is only used here as an exemplar. Werch and Owen (2002), for example, reported on 17 programs that increased substance abuse.

Selective Prevention

Selective interventions target subgroups of the populations that are determined to be at substantially higher risk for developing an addictive disorder (Metzler et al., 2013). Interventions aimed at a population might include a focus on a specific age bracket (e.g., at-risk adolescents), a particular region (e.g., a Northern community, a poverty-stricken district), a specific ethnicity or race (e.g., Indigenous populations, Russian immigrants), or any other group that is known to face increased problems with one or more addictions (e.g., college students). Examples include developing special groups for children who have parents or siblings that are addicts, targeting students having academic difficulties, children displaying behavioral problems, or developing programs for people who live in high-crime neighborhoods.

> Meta-analyses have shown that, as a general rule, these child/youth-focused programs are most efficacious when they (a) are interactive, (b) cognitive-behavioral or behavioral in focus, (c) teach drug refusal skills, (d) teach life skills in general, (d) focus on media influences on use of drugs, (d) emphasize norms for and social commitment not to use drugs, (e) use peer leaders, and (f) are skill focused (rather than merely instructional) and use modelling, rehearsal, feedback on performance, and reinforcement to build skills. (Metzler et al., 2013, p. 843)

When is the best time to intervene with children? The earlier, the better. Selective prevention can target preschool children or during the transition to elementary school, middle school, high school, or college (Metzler et al., 2013).

The National Institute on Drug Abuse (2003c) lists four selective programs on its website:

1. **Adolescents Training and Learning to Avoid Steroids (ATLAS)**. This program is targeted for male high school athletes. It is designed to help reduce risk factors for using anabolic steroids and other drugs.
2. **Coping Power**. This is a multicomponent child and parent preventive intervention aimed at pre-adolescent children who are at high risk for acting aggressively and developing later drug abuse and delinquency.
3. **Focus on Families (FOF)**. This is a program for parents receiving methadone treatment and their children. The program intends to reduce parents' use of illegal drugs while teaching family management skills to reduce the likelihood that their children will later use drugs.
4. **The Strengthening Families Program (SFP)**. This program is used both as a universal and as a selective multicomponent family-focused prevention program. It provides support for families with 6- to 11-year-olds. The program aims to improve parenting skills and consequently reduce the children's risk for subsequent problems.

Indicated Prevention

Indicated interventions target individuals who have already displayed early signs of substance abuse and related problem behaviors. Interventions may include abstinence as the goal, harm reduction, or reduction in use. An examples of an indicated prevention program is a substance abuse program aimed at high school students who are already displaying problematic behaviors such as failing grades, suicidal thoughts, truancy, or early signs of abusing alcohol or other drugs (Texas Health and Human Services, 2016).

Metzler et al. (2013) claimed that most developmental models of prevention are based on Bronfenbrenner's ecological framework, an approach that looks at the various environments that affect individuals. Regarding environmental impacts, children are in families, families are in neighborhoods, neighborhoods are in communities, and communities are in cultures. Preventive interventions can be designed at any level. Although we might assume that most parents attempt to do their best in rearing their children, various hardships can get in the way, such as mental instability, substance abuse, financial problems, and other stresses. Most children coming from a dysfunctional family will exhibit behavior problems or emotional issues, which may express themselves as passively withdrawing, irritability, aggressiveness, abusiveness, being demanding, and noncompliance (Metzler et al., 2013). As these children enter adolescence, they are more likely to become involved in early alcohol and substance use, high-risk sexual behavior, and delinquent behavior. Although there are other pathways to developing substance and behavioral difficulties, what is clear is that children who are experimenting with alcohol and other drugs and externalizing troublesome behaviors become more likely to have problems that are serious by mid- to late adolescence (Metzler et al., 2013).

In other words, these children become increasingly vulnerable to developing addictions. The sooner these behaviors are recognized, the earlier intervention can occur. From an ecological

perspective, interventions can focus both on the individual and on the various environments in which the individual is situated (e.g., family, peers, school). Metzler et al. (2013) wrote that parents and other adults need to reinforce desirable behaviors while at the same time remaining warm and nurturant. At the same time, they need structure and rules that are consistent and fair in homes that are predictable, secure, and stable.

A recent meta-analysis has shown that even brief alcohol interventions are effective in reducing self-reported alcohol use among adolescents and young adults (Tanner-Smith & Risser, 2016). Furthermore, effectiveness does not differ across geographical regions (Elzerbi, Donoghue, & Drummond, 2015).

The National Institute on Drug Abuse (2003b) lists two indicated programs on its website:

1. **Project Towards No Drug Abuse (Project TND)**. This program targets high school age youth attending alternative or traditional high schools. The program intends to prevent the transition from drug use to drug abuse through considering developmental issues that older teens face.

2. **Reconnecting Youth Program (RY)**. This is a school-based prevention program for high school students who are doing poorly in school and have the potential for dropping out. The program focuses on increasing school performance, reduction of drug use, and learning skills to better manage moods and emotions.

Finn (2012) acknowledged that some adolescents and youth are thrill-seekers, and abstaining may be viewed more as a challenge to do the opposite. Instead, harm-reduction strategies may be more beneficial. Csiernik, Rowe, and Watkin (2017) emphasized the importance of harm reduction even further. They wrote that, for most drug users, "harm reduction, not abstinence, is the only chance to survive" (Csiernik et al., 2017, p. 28). This may be overstated. Although it applies to many adults who have become dependent on a substance, it does not include most who use illegal drugs recreationally. *Harm reduction* is defined as the strategies or behaviors that individuals use to reduce the potential harm of continuing their substance use or abuse.

Psychoactive drug use, by definition, constitutes a high-risk behavior. Harm reduction intends to minimize or eradicate risk from using a psychoactive drug. Even when abstinence is the ultimate goal, it is overwhelming for many addicted individuals to consider before smaller steps have been achieved successfully. Although counselors may be convinced that abstinence is the correct goal for a particular client, remember that goals need to be negotiated collaboratively with clients. To not do so is to take away the free choice of the person sitting before you.

What are some harm-reduction strategies? Harm reduction may involve (a) using safer methods of administration (e.g., orally ingesting a drug instead of smoking or injecting it, using needle exchange or safe injection sites for heroin use), (b) reducing use of the problematic drug (e.g., reduce the number of joints smoked in a day), (c) using less potent varieties of the drug (e.g., switch to a cannabis product with a lesser percentage of THC, using a vape device from a licensed distributor instead of smoking cigarettes), (d) allowing longer periods between uses of the drug (e.g., smoke marijuana only on the weekend), (e) alternating drugs used to reduce addictive potential (e.g., snort cocaine one day and use cannabis for the next two days), (f) switching to a similar drug with lesser addictive potential (e.g., methadone instead of heroin), (g) acting responsibly while high on a drug (e.g., do not drive after drinking or getting high from other drugs), (h) using devices to prevent driving while impaired (e.g., installing ignition interlock devices on cars owned by convicted impaired drivers), and (i) providing the illegal drug "legally" to those who are addicted (e.g., providing medicinal heroin to heroin addicts) (Csiernik et al., 2017).

As you rightfully suspect, some of these harm-avoidance methods are considered highly controversial (Csiernik et al., 2017). Some believe that it is another way to enable and support drug use as opposed to reducing or eradicating it. Nonetheless, the literature supports these methods as ways of either minimizing use or minimizing the harm that results from use (Csiernik et al., 2017).

Vancouver, Canada, began operating North America's first legal, safe injection site in the downtown eastside in 2003. This district is considered the most impoverished area in Canada, primarily because of its large population of addicts. The program is called Insight, and there were concerns that it would lead to an increase in the number of injection drug users and decrease the likelihood that they would seek treatment. Research has shown, however, that having a safe injection site leads to an increase in addiction treatment and detoxification services. Vancouver also witnessed a reduction of public drug use and publicly discarded syringes and needles (Wood, Tyndall, Montaner, & Kerr, 2006).

The following are some potential benefits that result from harm-avoidance strategies:

1. Improved physical and psychological health (e.g., fewer harmful effects from safer administration of the drug, less stigma when the healthcare system and clinicians support harm-reduction strategies).

2. Fewer deaths resulting from suicide and overdoses (e.g., methadone is regulated and therefore safer for opioid addicts, providing quality heroin to heroin-addicted individuals at appropriate doses is safer than street heroin or fentanyl at unknown doses).

3. Reduced crime rates (e.g., active heroin-addicted individuals experience extreme cravings, and many will steal to get a fix).

4. Enhanced safety for citizens (e.g., fewer impaired drivers on the road, fewer break-ins to cars and homes).

Mass Media Campaigns

A harm-reduction campaign funded by the liquor industry itself called "Friends don't let friends drive drunk" was intended to improve their public image and reduce drunk-driving casualties (Finn, 2012). The slogan has been ingrained in the minds of many Americans since 1983. Its effectiveness is difficult to measure. Although 2015 ended a 50-year decline for lives lost in traffic accidents, in 2014 and 2015, there was a 7.2% increase in fatal crashes. Of the 35,000 reported deaths from traffic accidents, about one third were due to drunk driving (Knight, 2016).

A popular large-scale U.S. media campaign referred to as "This is your brain on drugs" that showed an egg frying in a very hot pan was launched in 1987. Finn (2012) wrote that the message became

material for comedy routines but that it did little to influence substance experimentation, use, and abuse. If anything, for youth who are thrill-seekers and impulsive, the campaign created more attraction than deterrence from wanting to experiment with drugs.

The more recent attempts to affect youth through media have focused on refusal skills and on empowering parents to become more engaged in the lives of their children (Finn, 2012). These messages may also be ineffective. When adolescents were asked whether they had seen the commercials, those who said they had reported little impact on their behavior. Conversely, there is evidence showing that the commercials were effective with parents (Finn, 2012)!

The expectations that children have about the effects of alcohol consumption predict the amount of alcohol they will consume later (Weinstein, Lisman, & Johnson, 2015). Weinstein et al. (2015) studied 183 Hispanic third-, fourth-, and fifth-grade students (50% girls) and found that alcohol expectancies could be modified. The researchers reported that their interventions were extremely brief and low-cost.

A web-based self-help intervention was found effective in reducing alcohol consumption. In the sample, 319 participants were low-risk users (LRUs), 298 were harmful/hazardous users (HHUs), and 312 scored in the suggestive range of being dependent (SDUs) on the AUDIT test. Although the program did suffer from low adherence (29% completed follow-up), it did reduce drinking in the HHU and SDU groups at 1-month follow-up. The authors emphasized the program's good cost-effectiveness (Monezi Andrade et al., 2016).

Newton, Deady, and Teesson (2014) recommended that prevention and early intervention should begin in the adolescent years. They noted that there are several evidence-based preventions and early intervention programs that have shown effectiveness in reducing substance use. Newton et al. went further in recommending that computers and the Internet be used to deliver evidence-based programs, suggesting as well that they have a better chance of reaching young people who are often reluctant to seek help for substance abuse. Ridout (2016) recommended the use of Facebook given that nearly all American college students use it.

Behavioral Addictions

Up to this point, the preventative efforts mentioned have focused on alcohol and other psychoactive drugs. But what about the behavioral addictions? What efforts are being made to help prevent them from developing? With work addiction, for example, there is research suggesting that an "overwork climate" fuels workaholism, but, besides that, there are few studies related to its prevention (Giannini & Loscalzo, 2016).

Werdell (2012) stated that food addiction prevention at the national level in the United States is almost nonexistent, whereas efforts are under way in Iceland. Research has shown that believing that products and/or behaviors are addictive leads to support for policies that focus on curbing consumption (Moran et al., 2016). Also, when the amount of junk food or unhealthy food available to children in schools is reduced, children do not react by eating more of these same foods outside school (Brownell & Gold, 2012).

Internet addiction prevention has become an important focus in South Korea (Cho, 2017). Cho (2017) reported that Taiwan had banned children under the age of two from using smartphones, tablets, and televisions. Parents allowing their children to use these devices face fines of up to $1500 U.S.! South Korean officials have become concerned due to several recent incidents: (a) a student in middle school killed his younger brother, mimicking an online game he had been playing, (b) a Korean man died while playing Internet games for 90 hours, (c) a Korean man jumped to his death after being expelled from an online game community, (d) another Korean man who was in his 20s was an online gamer who had his neck twisted to one side at a 70° angle, (e) a baby was choked to death while his parents played a game at an Internet café, and (f) still another Korean man died suddenly after playing a game for 10 consecutive days (Cho, 2017). There is now legislation in South Korea to have preventive Internet programs in all kindergartens, elementary through high schools, universities, and other public institutions (Cho, 2017). A program delivered in Bangkok, Thailand, has shown effectiveness in preventing gaming addiction among grade 4 and grade 5 students both immediately after the 8-week program and 3 months later (Apisitwasana, Perngparn, & Cottler, 2018).

Around the world, many jurisdictions have introduced Responsible Gambling (RG) programs with the intent of preventing gambling problems including addiction (Ladouceur, Shaffer, Blaszczynski, & Shaffer, 2017). Their synthesis of the empirical evidence revealed 29 articles that met at least one of their criteria. These studies revealed five primary responsible gambling strategies:

1. Self-exclusion. This is the practice whereby gamblers voluntarily banned themselves from gambling venues. These programs demonstrate some effectiveness. However, they have low utilization rates, and there is little evidence reporting long-term outcomes.

2. Using gambling behavior to develop algorithms. The idea behind algorithms is to identify potential problematic gamblers more effectively. Unfortunately, several of the currently offered algorithms are not based on empirical evidence or gambling behaviors themselves.

3. Limit setting. Limit setting involves gamblers presetting monetary and time limits before they begin gambling. Limit setting is effective for some individuals, although for others it can increase gambling problems.

4. Responsible gambling features in machines. In this approach, the gambling machine provides warning messages to gamblers with the intent of minimizing harm. These are "modestly effective" for reducing excessive gambling.

5. Employee training. In this approach, venue staff provides help to patrons experiencing problem gambling. These programs demonstrate partial effectiveness.

Ladouceur et al. (2017) cautioned, however, that the evaluation of most of these prevention programs has been a "haphazard process" (p. 232). Most have been implemented simply because they

"seemed like good ideas" (p. 232) and not because they had demonstrated evidence-based evaluation.

Parental Strategies for Preventing Addiction

Baumrind and colleagues (Baumrind, 1991; Baumrind, Larzelere, & Owens, 2010) developed a theory of parenting styles based on interviews of primarily White, middle-class preschool children and their parents. Her theory identified four parenting styles: (a) authoritative (e.g., warm, sensitive, loving parents who make age-appropriate demands that are explained), (b) authoritarian (cold, rejecting parents who make coercive demands on their children), (c) permissive (warm, accepting, loving parents who are overindulgent and inattentive), and (d) uninvolved (e.g., emotionally detached from their children who provide little time or energy for childrearing). The authoritative parenting style was found to produce the best outcomes, resulting in children with high self-esteem, cooperativeness, self-control, and social maturity. In Asian cultures, however, Chen, Deater-Deckard, and Bell (2014) argued that an authoritarian parenting style does not result in the adverse outcomes associated with this parenting style in Canada.

Nonetheless, the authoritative parenting style produces positive results in children, and some research indicates that it is the least likely to result in addiction potential (Ahmadi et al., 2014; Stafstrom, 2014). A recent study has also shown that adolescent alcohol misuse is positively correlated with the parental provision of alcohol just as parents having favorable attitudes toward alcohol use and parental drinking are associated with teenage alcohol misuse (Yap, Cheong, Zaravinos-Tsakos, Lubman, & Jorm, 2017).

Parents play a crucial role in monitoring their children's activities (Wodarski, 2017). For example, they are in the best position to influence the computer experiences and habits of their children (Weigle & Reid, 2014). Family functioning is also important. Healthy family functioning is associated with less Internet addiction (Shi, Wang, & Zou, 2017).

Similarly, family therapy aimed at improving the affectionate relationship between adolescents and their parents reduces the likelihood of Internet addiction (Zhang, Brook, Leukefeld, & Brook, 2016). As another strategy for reducing Internet addiction, Kiraly, Nagygyorgy, Griffiths, and Demetrovics (2014) recommended that parents encourage their children to play together with real-life friends. This helps them develop real-life, real-time personal relationships.

Individual Strategies for Preventing Addiction

In addition to programs aimed at preventing addiction, there are some helpful ideas for individuals wanting to avoid addiction in their own lives. Although there is no guarantee, these ideas are worth considering:

1. Resolve past hurts and trauma with help from a counselor or psychologist. Early childhood trauma is associated with addictions. Presumably, the earlier one works through these hurts and traumas, the likelihood of addiction should diminish.
2. Seek counseling if impulsivity, poor self-control, or poor emotional regulation are issues. These are also associated with a higher likelihood of developing an addiction.
3. Surround yourself with supportive individuals. This may be especially true for those who are marginalized (e.g., LGBTQ individuals, non-White individuals).
4. Develop strong bonds with family, at school, at church, and with others who do not condone drug use. Similar to point 3, supportive individuals create a supportive community. If your parents are not supportive, finding a "parent surrogate" as a positive parental figure in your life is considered very helpful (Stevens, 2013, p. 252). Having positive connections to adults and elders is helpful for Alaskan native youth (Philip, Ford, Henry, Rasmus, & Allen, 2016).
5. Pick friends wisely. It will be harder to avoid using drugs if your friends use them regularly.
6. Delay use of legal drugs. Those who begin smoking or drinking early are more likely to develop addiction issues.
7. Monitor your use of legal drugs. Avoid drinking excessive quantities of alcohol, especially repeatedly, and if you smoke only allow yourself a few cigarettes a day.
8. Avoid the use of illegal drugs. Illegal drugs are illegal for a reason! Particularly avoid using nonprescribed opioids, nonprescribed stimulants (including nicotine products), and nonprescribed depressants. Each of these drug classes has high dependency potential.
9. Become informed regarding the consequences of drug use. Education is your weapon in avoiding or reducing drug use.
10. Participate in community anti-drug programs. In this way, you become part of the solution instead of the problem.
11. Learn effective refusal skills. The ability to refuse alcohol and other drugs is predictive of lower alcohol use among college students (Stevens, Littlefield, Blanchard, Talley, & Brown, 2016).
12. Avoid prescription opioid use wherever possible. This class of drugs is highly addictive and should be avoided wherever possible (Beauchamp, Winstanley, Ryan, & Lyons, 2014).

Some of these ideas were suggested at https://www.addiction.com/get-help/for-yourself/prevention/

PREVENTION PROGRAM SCENARIO

You have designed an indicated prevention program for teenagers, ages 13–17, of divorced families. Your goal is to reduce their likelihood of turning to alcohol and other drugs as they cope with the loss created by the divorce. You are aware that many adolescents feel shame and guilt when the marriage of their parents ends. Through negotiating with Child Welfare, you are now provided the names of children who meet your criteria and the parent who has primary legal and residential custody. You spent hours planning your program, and you believe it will make a difference. You find, however, that, when you phone the parents on your list, some of them hang up on you and others tell you that they are not interested.

1. What factors might explain why parents are so uninterested in your program?
2. What other strategies might you try to secure parental interest and consent?

Evaluation

Few people would argue against prevention efforts. Substance abuse is associated with many serious and costly consequences, including "criminal activity, traffic crashes, health problems, unintentional injuries, premature death, and lost earnings" (Popovici & French, 2013, p. 882). If we could prevent individuals from becoming dependent on substances, individual and societal impacts could be enormous.

Nonetheless, how can we ascertain if a prevention program is resulting in measurable outcomes? As Finn (2012) noted, outcome data is essential because it is not merely a question of whether a program works; instead, some programs have increased rather than decreased the target behaviors! In other words, some prevention efforts have resulted in increased use of illegal drugs. Some programs serve to normalize drug use, and others that have relied on scare tactics have increased the interest of thrill-seekers (Finn, 2012).

Deciding on the target behaviors and the goals of the program is also important. For example, if the target behavior is reducing the use of stimulants, is a program successful if it reduces stimulant use but results in more individuals smoking marijuana? Furthermore, if the goal is abstinence but the participants of a program continue using albeit in a less harmful way, is that program successful? Technically neither program is successful despite the unintended positive results.

Before we look further at program evaluation, however, we will begin first by looking at how counselors can evaluate their effectiveness and improve their work with clients. Second, methods for assessing client improvement will be considered.

Evaluating Your Effectiveness

Before considering your effectiveness as an addiction counselor, ensure that your client is receiving the appropriate level of care (Lopez-Goni, Fernandez-Montalvo, Arteaga, & Esarte, 2017). If a potential client needs to be hospitalized, for example, counseling efforts will not meet with much success. The American Society of Addiction Medicine (ASAM; 2018) criteria are required for use in over 30 states, and it has become the most widely used and comprehensive set of guidelines for placement. The ASAM criteria use six dimensions for service planning and treatment across services and levels of care. These dimensions include (a) acute intoxication and/or withdrawal potential, (b) biomedical conditions and complications, (c) emotional, behavioral, or cognitive conditions and complications, (d) readiness to change, (e) relapse, continued to use, or continued problem potential, and (f) recovery/living environment. There is a cost associated with the materials needed for the ASAM criteria. These can be purchased from https://www.asam.org/resources/the-asam-criteria.

It is also important that you have realistic expectations. Bricker (2015) noted that, in addiction treatment, only between 3% and 7% of the variance in client outcomes has to do with the counselor. Remember that most addictions are considered chronic, relapsing conditions, which means that if clients fail or relapse trying to achieve their goals, it may be more about the nature of their addiction than about your helping efforts. Nonetheless, it may be that you can improve and become a better addiction counselor.

Although you are receiving your training to become an addiction counselor, your skills are likely being evaluated at regular intervals. If you are using this book now as a resource, you have already finished your training. A problem with evaluating ourselves is that we may exaggerate the positives and thereby "look good" on a summation of our skills. On the other hand, getting feedback from our clients is not always accurate either (Jones & Markos, 1997).

A good idea is to periodically conduct a self-assessment of your attitudes and beliefs, knowledge, and skills. Lambie, Mullen, Swank, and Blount (2018) recently updated their Counseling Competencies Scale. This is a valid measure that is usually completed by an instructor/professor or work supervisor. Nonetheless, you could use this scale as a way to judge if you have work to do in any of the areas covered (a copy of the scale is available from http://webmedia.jcu.edu/counselingdepartment/files/2016/03/CCS-R-Evaluation.pdf). Another good scale is offered by the Council of Counseling Psychology Training Programs (n.d.; available from https://www.ccptp.org/assets/docs/copsy%20competencies%20final2.pdf) There are plenty of other scales to choose from if you desire. Tate, Bloom, Tassara, and Caperton (2014), for example, critiqued 41 instruments.

Another self-assessment worthy of mention is the Addiction Counseling Self-Efficacy Scale (ACSES; Murdock, Wendler & Nilsson, 2005). Factor analysis found that it measures

self-efficacy in five areas: (a) specific addiction skills, (b) assessment, treatment planning, and referral skills, (c) comorbidity skills, (d) group counseling skills, and (e) basic counseling skills. The instrument has good reliability and validity (Murdock et al., 2005; Wendler, 2008).

It is also important to review your multicultural competencies. Gamst and Liang (2013) reviewed and critiqued 16 published multicultural competence instruments. When working with LGBTQ individuals, use inclusive language (Ross, Waehler, & Gray, 2013). Bidell and Whitman (2013) reviewed three scales that you can use to measure the extent to which you offer lesbian, gay, and bisexual affirmative counseling.

Another approach is to look at scales that measure the working alliance. The working alliance is foundational to successful addiction counseling (Shaw & Murray, 2014). Research suggests that, if the counselor and client have a positive alliance at the beginning of treatment, greater symptom change occurs (Marmarosh & Kivlighan, 2012). Although the Working Alliance Inventory is popular, it has psychometric problems (Doran, Safran, & Muran, 2016; Falkenstrom, Hatcher, Skjulsvik, Larsson, & Holmqvist, 2015). A six-item working alliance questionnaire (called the Session Alliance Inventory) is likely sufficient, and it can be administered repeatedly during counseling with a client (Falkenstrom et al., 2015; available from http://liu.diva-portal.org/smash/get/diva2:802104/FULLTEXT01.pdf). Two other brief measures described by Shaw and Murray (2014) are the Session Rating Scale (available from https://www.scribd.com/document/355449951/The-Session-Rating-Scale-pdf) and the Outcome Rating Scale (available from https://www.scottdmiller.com/wp-content/uploads/documents/OutcomeRatingScale-JBTv2n2.pdf), both of which can be used as well for measuring client outcomes (see next section called Evaluating Client Improvement).

For alliance ratings in group counseling, the Group Session Rating Scale (GSRS) can be used (Quirk, Miller, Duncan, & Owen, 2013; article about the GSRS available from http://www.scottdmiller.com/wp-content/uploads/2014/06/Group-SRS-Article.pdf). The Family Therapy Alliance Scale can be used for family counseling despite some problems with its construct validity (Johnson, Ketring, & Anderson, 2013).

Empathy is an important aspect of the working alliance, and, although it is often considered a nonspecific effect in addiction research, it varies substantially among counselors (Miller & Moyers, 2015). For example, research has found that the stronger the working alliance, the more motivated alcohol-dependent clients are to change their drinking pattern (Cook, Heather, & McCambridge, 2015).

Ensure that you are using empirically supported (i.e., evidence-based) treatments in your work with addicted individuals. The main types of treatment include cognitive-behavioral therapy, multidimensional family therapy, motivational enhancement therapy, relapse prevention therapy, and broad addiction-focused pharmacotherapy (Hartzler & Rabun, 2014).

Evaluating Client Improvement

Boswell, White, Sims, and Romans (2013) stated that, in one study, 29% of psychologists reported using an outcome assessment in their practice. One such measure is the Outcome Questionnaire-45.2 (OQ; Wells, Burlingame, Lambert, Hoag, & Hope, 1996). The OQ has good reliability (Wells et al., 1996), and a study found that the instrument's total score and the Symptom Distress subscale have strong validity support (Boswell et al., 2013). Weaker validity support was found for the Interpersonal Relations and Social Role subscales (Boswell et al., 2013). The OQ has also been used in a counseling center to provide support for those skeptical of whether counseling intervention makes a difference (Talley, & Clack, 2006). [A copy of the questionnaire itself is available from http://booksite.elsevier.com/9780123745170/Chapter%202/Chapter_2_Worksheet_2.4.pdf and scoring of it from http://www.projectechola.org/wp-content/uploads/2014/01/Outcome-Questionnaire-OQ-45.2-Quick-Guide-2.pdf]

Another measure of outcomes that do not rely on a standardized questionnaire but instead utilizes the client's perceptions of change is called "life space mapping" (Rodgers, 2006, p. 227). Rodgers (2006) presented preliminary results for his idea. It has the advantage of bringing the client into ownership for the change process (see article for details). Another flexible method is using client self-anchored scales to measure outcome, a solution-focused method developed by Franklin, Corcoran, Nowicki, and Streeter (1997; see article for details).

Deane, Kelly, Crowe, Lyons, and Cridland (2014) did telephone follow-up interviews with 700 clients (582 males, 118 females) 3 months after discharge from a residential drug and alcohol program. They boasted a 51% follow-up rate at the cost of $82 U.S. per completed interview. Of course, counselors themselves could do the interviews but preferably not with their own clients.

Another method of measuring outcomes is to use the scales for specific addictions that are listed in the section of Chapters 9 through 21 called Available Measures. Pick a measure that has demonstrated reliability and validity and use it at both the beginning and end of treatment.

For measuring outcomes when offering group counseling, Quirk, Miller, Duncan, and Owen (2012) created the four-item Group Session Rating Scale (request copy of this measure through Scott D. Miller's website http://www.scottdmiller.com/). The Eberly Center at Carnegie Mellon University offers several instruments for free that can be downloaded from its website, such as the Sample Group Work Self Evaluation and the Sample Self Evaluation Form together with various peer and group assessments (visit https://www.cmu.edu/teaching/designteach/teach/instructionalstrategies/groupprojects/tools/index.html).

For family counseling, one commonly used measure is the McMaster Family Assessment Device (Epstein, Baldwin, & Bishop, 1983). Each family member 12 years of age and older completes the 60-item scale. The instrument provides a measure of general functioning of the family and six subscales (i.e., problem-solving, communication, roles, affective responsiveness, affective involvement, and behavioral control) [The questions are available from http://chipts.ucla.edu/wp-content/uploads/downloads/2012/02/McMaster-FAD-Subscales.pdf and the scoring from http://dmhoma.pbworks.com/w/file/fetch/97996663/FAD%20Quick%20Guide%2007152015.pdf].

CLIENT IMPROVEMENT SCENARIO

You are a counselor in private practice, and your client's name is Frederick. Frederick has been addicted to using both alcohol and cocaine. Over the past 16 weeks of treatment, Frederick has successfully given up drinking and at other times given up cocaine. At no time has Frederick been able to remain abstinent from both drugs. Your measure of the working alliance suggests that Frederick believes that you are the right counselor for him.

1. To what extent would you believe you have been successful in counseling Frederick if he were to give up one drug indefinitely but remain on the other drug?
2. What strategies might you use to help Frederick abstain from both drugs?

Program Evaluation

Introduction

Program evaluation is defined as "a systematic study using research methods to collect and analyze data to assess how well a program is working and why" (United States Government Accountability Office [USGAO], 2012, p. 3). The USGAO (2012) document called *Designing Evaluations* is very useful if you are called upon to do an evaluation, and it can be downloaded at http://www.gao.gov/assets/590/588146.pdf. Evaluation is different from research. "Its primary purpose is to provide information to decision makers to help them make judgments about the effectiveness of a program and to improve it" (Thompson & Kegler, 2015, p. 338). Importantly, evaluation occurs within a political arena (Brandon & Sam, 2014). This means that stakeholders often have a vested interest in seeing a particular result. Several books have been written about program evaluation (see Amazon.com for a detailed listing), and anyone tasked with completing one would be well-advised to reference one or more of these texts.

Thompson and Kegler (2015) listed several reasons that we do evaluations (adapted and placed in question format):

1. Piloting program. Before we start using the program on a full-scale basis, does it work?
2. Suitable materials. Are the materials suitable for the people who will use them?
3. Quality control. Is the program being delivered the way it was designed?
4. Monitoring results. Is the program getting the desired results?
5. Early warning of problems. Are we getting any warning signs that could become serious if they are not addressed?
6. Unexpected benefits or problems. Is the program producing any unexpected benefits or problems?
7. Feedback for program managers. Can program managers improve the service?
8. Tracking progress. Is progress toward the program's goals being recorded?
9. Future programming. Will the evaluation data help us develop future programs?
10. Demonstrate program effectiveness. Is the program effective for the target population, and can these results be helpful to share with the public, to others who want to run similar programs, and to funders?

Several indirect benefits can result from evaluating a program as well (Thompson & Kegler, 2015):

1. Staff benefits. Staff hear from the people whom they are serving. They also hear the benefits of the program in participants' own words. Staff morale may improve when they are shown that their efforts make a difference or that improvements will be made to enhance effectiveness.
2. Participant benefits. Program participants know they have a voice in program delivery, which fosters a greater sense of inclusion and cooperation.
3. Advertising and marketing benefits. Media may promote the program if it demonstrates effectiveness.

The mission of the American Evaluation Association is the improvement of evaluation practices and methods, along with promoting evaluation as a profession, increasing its use, and supporting the generation of theory and knowledge regarding evaluation (Parsons et al., 2018). The *AEA's Ethical Guiding Principles* (Parsons et al., 2018) lists six principles, each of which has several subpoints. The five principles include (a) systematic inquiry, (b) competence, (c) integrity, (d) respect for people, and (e) common good and equity. An ethical evaluation should address all five principles.

As reported in the Prevention section of this chapter, several *prevention* programs targeted at addictions do make a substantial and measurable difference. Unfortunately, evaluations of bona fide *treatment interventions* in the addictions field have consistently reported either no or only small differences in outcome (Bergmark, 2015). Results will likely be poorer still if Schildhaus's (2015) suggestion is accepted. Schildhaus recommended that substance abuse treatment should be evaluated in a longitudinal, national study. In their editorial, DuPont, Compton, and McLellan (2015) urged that 5-year recovery should be the new standard for assessing the effectiveness of substance abuse treatment.

Evaluations conducted after a brief period following intervention may produce only transitory results. For example, a recent evaluation found that treatment benefit for heroin-addicted individuals was no longer evident after 12 months (Demaret et al., 2016).

Several types of evaluations can be conducted. Brandon and Sam (2014), for example, listed 25 different evaluation approaches

and models. In a broad sense, there are summative and formative evaluations. Summative evaluations render a final judgment on certain aspects of a program's performance (e.g., were the goals or objectives met?). Formative evaluations, on the other hand, are designed to guide improvements to a program (e.g., how can we improve this program?). Concerning prevention evaluations, four types of evaluation are widely recognized: formative, process, outcome, and economic (Thompson & Kegler, 2015).

Formative evaluations are often conducted before a program is offered to ascertain whether it succeeds in accomplishing its goals. Process evaluations focus on the way a program is delivered contrasted with whether it achieves its goals. They often use both quantitative and qualitative methods to measure aspects of program delivery. Outcome evaluations are linked to the logic underlying the program, and these nearly always use an experimental or quasi-experimental design (e.g., does the program achieve its desired outcomes?). Finally, an economic evaluation looks at the costs and the benefits of a program (i.e., given the cost and the outcome, is the program worth continuing?) (Thompson & Kegler, 2015).

There are different methods for conducting an economic evaluation (e.g., cost analysis, threshold analysis, cost-effectiveness analysis, cost-utility analysis). These four methods are detailed in Thompson and Kegler (2015).

Gass, Foden, and Tucker (2017) described a fifth type of evaluation called a needs assessment. A needs assessment can answer questions related to the level of care that a client needs, the right program for a particular client, and how the desired outcome can be obtained. As Gass et al. expressed, a "needs assessment is intended to measure the gap between what is and what could be" (p. 429).

WHAT MIGHT YOUR EVALUATION PROGRAM LOOK LIKE?—PART I

Imagine you have gone on a diet that seems too good to be true. The diet requires that you restrict calories to 2500 per day, but, on weekends, you get to gorge yourself on both food and liquor—as much as you want (please note that this is a fictitious diet)! Besides weighing yourself regularly, what other outcomes are measurable? How long should you stay on the diet before you conclude that the diet is successful?

Teaching Program Evaluation

The next two sections review program evaluation for (a) prevention programs and (b) treatment programs. Before then, the work of Shannon and Cooper (2016) regarding teaching program evaluation will be highlighted. Shannon and Cooper began their chapter looking at Stevahn, King, Ghere, and Minnema's (2005) six competencies that students should learn regarding program evaluation (i.e., systematic inquiry, situational analysis, interpersonal competence, project management, professional practice, and reflective practice). Each is described as follows:

1. Systematic inquiry. This component refers to the technical aspects of program evaluation, including such skill sets as design, data analysis, analysis, and reporting. This requires that evaluators know how to pose questions, develop a plan to answer them, identify data sources, ascertain the validity and reliability of the data, gather the data, and then analyze it.
2. Situational analysis. This component refers to evaluators' needing to understand contextual components of the program and its readiness to be evaluated. This includes the needs of the program, strengths, and weaknesses, resources, and even political issues that can help or hinder the evaluation. It is important to include others in planning the evaluation, particularly the stakeholders (i.e., the people or group that is financing or most interested in the evaluation's results). This builds cooperation and "buy-in."
3. Interpersonal competence. Evaluators need to have good interpersonal skills both in speech and in writing with the key stakeholder(s). For example, they need to negotiate the boundaries and the budget for the evaluation.
4. Project management. The evaluator needs to both focus on the overall purpose of the evaluation and also supervise its project personnel and its budget. This involves developing written plans for what needs to occur and providing these plans to the appropriate people.
5. Professional practice. Evaluators need to work ethically and professionally, adhering to the American Evaluation Association's guidelines for evaluation noted earlier.
6. Reflective practice. Evaluators must think critically about themselves as practitioners and be open to learning more and improving their skills. For example, journaling, peer collaboration, and reflecting on completed evaluations are helpful.

Shannon and Cooper (2016) stressed that successful program evaluation requires a mix of interpersonal skills and knowledge of methodology. These skills can be developed through taking courses, working in the field, receiving mentorship, and engaging in reflective practice.

Prevention Evaluation

Unlike treatment programs, which may result in measurable short-term and long-term benefits, prevention programs might not result in changes for many years to come (Popovici & French, 2013). Additionally, given that some benefits may take a long time to emerge, evaluating a prevention program too soon may result in its termination prematurely (Popovici & French, 2013). Regardless, given the scarce public and private funds available for treatment and prevention, it is critical to know which cost-effective addiction interventions show evidence of reducing the long-term negative consequences associated with substance dependence and addictive behaviors (Popovici & French, 2013.

Thompson and Kegler (2015) wrote an excellent and highly recommended chapter regarding program evaluation for health promotion (i.e., prevention). Importantly, Thompson and Kegler stressed that evaluation should be included when a program is being designed, and then the evaluation should continue throughout the program. The program should be described, including such key elements as defining the target population and explaining the program's rationale, goals, and objectives; the components and activities that comprise the program; the logic underlying it; the resources required; and the stage of the program's development (i.e., planning, pilot, or implementation stage).

Treatment Evaluation

Nelson and Steele (2016) recommended a multifaceted approach to treatment evaluation. They surmised that research evidence is too narrowly defined and focused on treatment outcomes. Instead, they advanced four types of treatment evaluation as follows:

1. Outcome evaluation
    a. Efficacy. Does the treatment work when conditions are controlled (i.e., does it have internal validity)?
    b. Effectiveness. Does the treatment work in actual settings (i.e., does it have external validity)?
    c. System level. Does the treatment result in improvement in important systems?
    d. Mediators/moderators. In what ways and under what conditions does the treatment work?
2. Provider evaluation
    a. Perspective. Does the treatment appeal to providers?
    b. Retrospective. Does the treatment appeal to practitioners?
3. Consumer satisfaction
    a. Perspective. Does the treatment appeal to clients?
    b. Retrospective. Is the treatment satisfying to clients?
4. Economic evaluation
    a. Cost-effectiveness. Is the treatment as offered cost-effective?
    b. Cost offset. Does the treatment result in offsetting costs to other systems? (adapted from Nelson & Steele's, 2016, chart on p. 390)

Nelson and Steele further suggested an overarching question that they believe should guide treatment research: "Can a treatment be widely implemented with positive results?" (p. 391). The authors anticipated objections to their model. They believed that some would find it too ambitious and others would insist that outcome evaluation is sufficient.

Neale et al. (2014) used a Delphi method (i.e., a type of research that relies on the professional opinions of experts) with 10 addiction psychiatrists, nine senior residential staff, and six senior inpatient detoxification staff. The question asked was how addiction recovery should be measured. The authors' content analysis revealed that recovery ought to span 15 domains:

"substance use, treatment/support, psychological health, physical health, use of time, education/training/employment, income, housing, relationships, social functioning, offending/anti-social behavior, well-being, identity/self-awareness, goals/aspirations, and spirituality" (p. 310). Consequently, Nelson et al. recommended that a treatment evaluation program include these 15 domains.

WHAT MIGHT YOUR EVALUATION PROGRAM LOOK LIKE?—PART II

Regarding the 15 domains of Neale et al. (2014), what are some ways that you could evaluate each domain? If you conducted the evaluations yearly over the next 5 years, what could you do that would help to reduce anticipated "drop-outs" (i.e., participants who can no longer be reached, those who decline continued participation in the evaluation study)?

Assessment

Overview

Chapters 9 through 21 each have a section called Diagnostic and Assessment Considerations. There you will find not only *DSM-5* criteria for those addictions currently recognized in the DSM system but also several assessments and screening instruments used for that particular addiction. Wherever these instruments are available online, links are provided. In several cases, clients can complete the instrument online and have it scored instantly, all at no cost. Given this feature of these stand-alone chapters, this section will

look at assessment generally and provide several valuable links to instruments useful in addiction counseling practice.

Goodwin (2016) recommended that, from the first greeting, counselors adopt a deeply caring, compassionate, respectful, and accepting attitude toward clients. He also stressed to be careful when clients are using defense mechanisms, noting that these occur to protect people from overwhelming stress and anxiety. Helping clients reduce their defense mechanisms might become a goal of treatment but should not be addressed outright during the assessment. Goodwin also reminded counselors that substance use and substance use disorders (SUDs) are on a continuum, and using psychoactive drugs, whether legal or illicit, does not by itself predict or diagnose a SUD. The same applies to the other addictive behaviors described in this textbook. Furthermore, assessments are ongoing, and new information may override earlier hypotheses. Also, as clients receive treatment, new treatment goals may need to be developed over time (Goodwin, 2016). Lastly, Goodwin encouraged counselors to gather as much information as possible from referral sources, family and friends, interviews, assessment instruments, and lab results.

Del Boca, Darkes, and McRee (2016), Donovan (2013), Goodwin (2016), and Knott (2014) outlined the purpose and components regarding the assessment of addictive behaviors. These include the following:

- Creating a positive working alliance. This can be facilitated by using a motivational interviewing style.
- Ascertaining when working with minors if they can provide consent to treatment themselves and involving parents as desired or required.
- Treating any problem that requires urgent care.
- Gathering information from secondary sources where appropriate (e.g., parents, employer, friends, other counselors).
- Gathering information about clients. Take a thorough history and obtain detailed information about their substance use and/or addictive behaviors. This includes looking at the quantity and frequency of use and their pattern of use. If withdrawal symptoms are occurring, these need to be addressed.
- Ascertaining the *DSM-5* diagnosis and severity (if the particular addictive behavior is included in *DSM-5*).
- Deepening your understanding of clients' physical, emotional, cognitive, social, and contextual factors that trigger their addictive behavior. Also focus on problems and their severity within any or all areas.
- Identifying clients' assets and strengths.
- Determining clients' readiness to change.
- Determining clients' expectations of receiving help.
- Hooking the positive side of clients' ambivalence to change.
- Motivating clients to change their behavior.
- Providing feedback and a summary to clients.
- Integrating all information available into the most appropriate treatment and collaborating with clients regarding their choice.
- Monitoring clients' progress in making positive changes.
- Changing the treatment plan whenever needed.
- Ensuring that clients can afford sessions if you are in private practice.

Besides these components, also assess for suicide and homicide risk (a helpful section regarding suicide and homicide risk assessment was included in Chapter 6), overdose risk, any threats to dependent children, impact of substance use on children, polyaddictions, comorbidity, unsafe injecting practices, unsafe sexual practices, how the drug use is funded (Knott, 2014), and mental status (see Appendix D for an excellent example of a mental status examination). Also, assess for whether clients have a history of trauma, abuse, and violence; treatment history regarding mental health and addiction issues; cultural and diversity issues, strengths, and identities; language and speech problems; developmental issues; legal history and current status; spiritual views, issues, and available supports; coping skills; physical, sensory, or mobility challenges; relapse history; and diagnostic impressions (Goodwin, 2016).

Keep in mind that a substance-induced disorder can and does mimic nearly every other form of psychopathology (Margolis & Zweben, 2011). Cocaine withdrawal, for example, might produce an agitated depression, lengthy cocaine or other stimulant abuse can cause paranoia, individuals under the influence of hallucinogenic drugs might appear psychotic, chronic cannabis abusers might appear listless and lacking motivation for weeks or months following cessation of use, opioid-addicted individuals experience higher rates of depression compared with the general population, and those withdrawing from opioids might appear both depressed and anxious (Margolis & Zweben, 2011).

A counselor could conduct a theory-driven assessment, referring to Chapter 3. Best practice would dictate that you base your assessment on the biopsychosocial theory. An assessment intends to be inclusive of contributing and determining factors. Goodwin (2016) strongly encouraged practitioners to follow a holistic, biopsychosocial-spiritual model of addiction and argued that this "is necessary to formulate comprehensive and effective assessment and treatment plans" (p. 449).

Counselor assessment strategies include having clients complete tests, scales, inventories, and/or questionnaires (TSIQs). Some of these TSIQs need to be administered by a counselor or other mental health clinician. Mental health practitioners also rely heavily on interviews and history taking, which is sometimes accomplished in full or in part by using a history questionnaire.

If you are working for a substance abuse treatment center, the organization will likely have its own protocol for conducting the intake interview and history collection. If you are working independently, you might find Alderson's Personal Functioning Questionnaire (PFQ; the questionnaire, the manual, and the pie chart are available as free downloads from https://kevinalderson.ca/) helpful for this purpose. A time- and cost-savings measure is to email this to clients before you see them for the first session and either ask them to return it to you before you meet or have them bring it to the first session. The PFQ, which takes clients about 45 min to complete, collects information in 14 areas: background information, description of presenting problem(s), living arrangements and children, friendships, family of origin, spiritual beliefs, emotional health, drug use, physical health and medications, recreation and leisure activities, intimate romantic/sexual relationships, career choice, work and volunteer history, and ethnicity/diversity considerations. Clients also

rate their functioning in most of these areas, providing the counselor a firsthand glimpse into areas that the client sees as problematic.

Another excellent history questionnaire is the Multimodal Life History Inventory, Third Edition (MLHI-3), by Clifford Lazarus (cost is about $40.00 for 20 inventories from researchpress.com). The first version of this instrument was the Multimodal Life History Questionnaire (MLHQ) by Clifford's late father, Arnold Lazarus (1989); an example of his original questionnaire can be found by visiting www.curelifeworks.com. The MLHI-3 and the MLHQ are based on Arnold Lazarus's multimodal approach to helping clients.

The most important guidelines for determining which TSIQs to use comes down to their reliability and validity (Del Boca et al., 2016). Reliability and validity are generally regarded as the two most important psychometric properties of an instrument. If a TSIQ does not report its psychometric properties, it likely means that these have not been determined. In the era of using evidence-based instruments, one is generally advised to avoid these TSIQs until (or if) their psychometric properties are published. Furthermore, some TSIQs produce biased results for diverse individuals (e.g., race/ethnicity, religion, LGBTQ) (Del Boca et al., 2016). The best way to ascertain this is to find out who made up the group on which the particular TSIQ was tested.

Many instruments have also been translated into several languages (Del Boca et al., 2016). The Addiction Severity Index, for example, has been translated into 17 languages, along with a computerized Spanish-language version (Del Boca et al., 2016).

Assessing alcohol and other SUDs (and their severity) is typically accomplished through individual verbal report or via written self-report measures (Del Boca et al., 2016). Interestingly, although one might suspect that addicted individuals would lie or minimize their behavioral excess on self-report measures, research indicates that most provide results with high validity (Rowe, Vittinghoff, Colfax, Coffin, & Santos, 2018; Secades-Villa & Fernandez-Hermida, 2003). Research has shown that TSIQs that include retrospective accounts regarding daily estimation of the quantity/frequency of addictive behaviors are both reliable and valid for 90 days to 6 months (and up to 12 months in one study) (Del Boca et al., 2016). Nonetheless, daily estimation measures in real time produce the most accurate results (Del Boca et al., 2016).

Mandatory or voluntary drug testing might be required in your work setting, and these include screening tests, confirmatory tests, urine testing, oral fluid testing, and hair testing (Knott, 2014). Knott (2014) provided the approximate amount of time that the following drugs can be detected in urine:

- Amphetamines including methamphetamine (2 days).
- Benzodiazepines (ultrashort-acting = 12 hours; intermediate-acting = 2–5 days; long-acting = 7 days or more).
- Buprenorphine and metabolites (8 days).
- Cocaine metabolite (2–3 days).
- Methadone (maintenance dosing; 7–9 days).
- Codeine, morphine, and heroin (heroin is detected in urine as metabolite morphine; 48 hours).
- Cannabinoids (single use = 3–4 days; moderate use [3 times a week] = 5–6 days; heavy use [daily] = 20 days; chronic heavy use [more than 3 times a day] = up to 45 days).

Instruments

First and foremost, arguably your best tool for assessing all mental disorders, including substances and addictive behaviors, is the *DSM-5* (APA, 2013). Purchase a copy and keep it nearby. The Screening, Brief Intervention, and Referral to Treatment (SBIRT) tool is excellent as well, published by the Substance Abuse and Mental Health Services Administration (SAMHSA; visit https://www.samhsa.gov/sbirt for details. Further details and a link to a free online SBIRT course can be found at https://www.integration.samhsa.gov/clinical-practice/sbirt). There is a free app for SBIRT (called SBIRT for Health Professionals) available for IOS devices at https://itunes.apple.com/us/app/sbirt-for-health-professionals/id1352895522?mt=8.

Samet, Waxman, Hatzenbuehler, and Hasin (2007) stated that, during the Clinical Trials Network of the National Institute on Drug Abuse, their preferred instruments were the Addiction Severity Index (ASI) and the Composite International Diagnostic Interview (CIDI). CIDI-5 is currently being developed and will, it is hoped, be available soon (see https://www.hcp.med.harvard.edu/wmhcidi/who-wmh-cidi-training/ for updates).

The ASI is a commonly used semistructured interview that addresses seven potential problem areas in substance-abusing patients. It takes about 1 hour with a skilled interviewer. The ASI is currently in its sixth version (ASI-6), and the ASI-MV (ASI-Multimedia Version) is the electronic version of it. The advantage of the ASI-MV is that the client administers it, and it can be completed in a counseling setting or remotely, whereas the paper-and-pencil versions require a trained interviewer to administer (see https://www.hazelden.org/web/public/asimv_main.page for details). Hazelden Publishing also markets the Behavioral Health Index-Multimedia Version (BHI-MV), which overviews client functioning in several key life areas. Hazelden can be contacted by calling 800-328-9000. Denis, Cacciola, and Alterman (2013) compared ASI-6 with ASI-5 and found ASI-6 to cover more comprehensive content in its scales. Note that ASI-5 is available for free (see http://adai.washington.edu/instruments/pdf/Addiction_Severity_Index_Baseline_Followup_4.pdf) as well as a complimentary treatment planning manual based on this index (http://jpwpkl.moe.gov.my/download/phocadownload/terkini/2014/sppk/ucd/BahanLDPCOMBATDAPS/asi%20manual.pdf).

There are many instruments available to counselors. For example, the Alcohol and Drug Abuse Institute at the University of Washington lists 1031 TSIQs (reference follows)! If you click the "more" button on the right of each TSIQ, it provides information regarding the instrument and where to get it.

1. Alcohol and Drug Abuse Institute, University of Washington. (n.d.). Screening and assessment instruments. Retrieved on April 16, 2019, from http://lib.adai.washington.edu/dbtw-wpd/exec/dbtwpub.dll?AC=QBE_QUERY&QY=find%20(Name%20/%20Acronym%20ct%20*)%20and%20(Status%20ct%20public)&XC=/dbtw-wpd/exec/dbtwpub.dll&BU=http%3A//lib.adai.washington.edu/instrumentsearch.htm&TN=instruments&SN=AUTO9271&SE=874&RN=0&MR=0&ES=1&CS=0&XP=&RF=Brief&EF=&DF=Full&RL=1&EL=1&DL=1&NP=3&ID=&MF=WPEngMsg.ini&MQ=&TI=0&DT=&ST=0&IR=14&NR=0&NB=0&SV=0&BG=0&FG=000000&QS=

2. SAMSHA-HRSA (n.d.; see reference following) contains many excellent resources. The first link under *Resources* is the *DSM-5 Online Assessment Measures*, produced by the American Psychiatric Association. Other resources include the Healthy Living Questionnaire, the Kessler 6 and Kessler 10, the Patient Stress Questionnaire, the Patient Satisfaction Survey, the M3 Checklist, and many more that are specific to different conditions including drug and alcohol use.

   SAMHSA-HRSA Center for Integrated Health Solutions. (n.d.). Screening tools. Retrieved on April 16, 2019, from https://www.integration.samhsa.gov/clinical-practice/screening-tools

3. NIDA (2018; see reference following) offers links to several useful screening tools. The group's website informs readers if each instrument is for screening just alcohol, just drugs, or both. They also provide information regarding whether the focus of each TSIQ is adults or adolescents, and whether it is self-administered or clinician administered.

   National Institute on Drug Abuse (NIDA; 2018, June). Screening tools and resources. Retrieved on April 16, 2019, from https://www.drugabuse.gov/nidamed-medical-health-professionals/screening-tools-resources

4. ASAM (n.d.; see reference following) also provides links to useful screening tools. They include AUDIT-C, CRAFFT Screening Tool, NIDA Modified ASSIST Drug Use Screening Tool, Online Screening Tool: Alcohol Screening, and Online Screening Tool: Drug Screening, and Online Assessment Measures: Cross-Cutting Symptom Measures.

   American Society of Addiction Medicine (ASAM). (n.d.). Screening and assessment tools. Retrieved on April 16, 2019, from https://www.asam.org/education/live-online-cme/fundamentals-program/additional-resources/screening-assessment-for-substance-use-disorders/screening-assessment-tools

5. Winters, K. C. (2004, August). Assessment of alcohol and other drug use behaviors among adolescents. Retrieved on April 16, 2019, from https://pubs.niaaa.nih.gov/publications/AssessingAlcohol/behaviors.htm

   This publication lists a good selection of instruments and interviews for working with adolescents. Winters also indicates whether there are norms and who comprises the normed group.

6. Healthyplace.com advertises itself as the "largest consumer mental health site on the net. We provide authoritative information and support to people with mental health concerns, along with their family members and other loved ones" (quoted from the website). Counselors should note that https://www.healthyplace.com/psychological-tests contains many tests that can be completed online covering both addictions and mental health issues.

7. Several drug-focused online quizzes are available from https://www.rehabs.com/assessments/

8. Adult Substance Abuse Subtle Screening Inventory – 4 (SASSI-4). https://sassi.com/

   Quoted from website:

   > Identifies high or low probability of substance use disorders and includes a prescription drug scale that identifies individuals likely to be abusing prescription medications. It also provides a measure of profile validity and clinical insight into the level of defensiveness and willingness to acknowledge experienced consequences of substance use disorder.

Most instruments are free, but the SASSI is not. Although the SASSI is a widely used instrument, Goodwin (2016) stated that it does *not* offer advantages over other instruments in screening for SUDs.

RESOURCES AND VIDEOS

Resources

The following list of Internet resources regarding *prevention* was first assembled by Fisher and Harrison (2013, p. 329):

1. SAMHSA Evidence-Based Practices Resource Center. https://www.samhsa.gov/ebp-resource-center
2. Center for the Application of Prevention Technologies. http://www.samhsa.gov/captus (they have an indirect link at https://recoverymonth.gov/organizations-programs/center-application-prevention-technologies-capt)Prevention principles .drugabuse.gov/pdf/prevention/RedBook.pdf
3. National Clearinghouse for Alcohol and Drug Information (NCADI). https://store.samhsa.gov/
4. Prevention specialist certification. internationalcredentialing.org/PSStandards.asp

Additional resources regarding *prevention* were listed by Smith and Luther (2013; these have been updated from source):

1. Government sites:
   a. Centers for Disease Control and Prevention (CDC): cdc.gov/
   b. National Education Association Health Information Network: http://www.nea.org/home/61155.htm
   c. National Institute on Alcohol Abuse and Alcoholism (NIAAA): niaaa.nih.gov/

   d. National Institute on Drug Abuse (NIDA): nida.nih.gov/
   e. National Institutes of Health (NIH): nih.gov/
   f. Substance Abuse and Mental Health Services Administration (SAMSHA), Department of Health and Human Services: samhsa.gov/
   g. U.S. Department of Health and Human Services (HHS): hhs.gov/
2. University-based sites:
   a. Higher Education Center for Alcohol and Drug Misuse Prevention and Recovery: https://hecaod.osu.edu/
   b. Center on Addiction: https://www.centeronaddiction.org/
3. Miscellaneous:
   a. American Society of Addiction Medicine (ASAM): https://www.asam.org/
   b. Drug Policy Alliance: drugpolicy.org/about
   c. Partnership for Drug-Free Kids: drugfree.org/
   d. Partnership for Responsible Drug Information: prdi.org/

Resources for *program evaluation* are available from each of the professional evaluation organizations. Visit their websites for details. Other helpful organizations are the Centers for Disease Control and Prevention (https://www.cdc.gov/eval/resources/index.htm), Evaluation Resource Centre (visit https://erc.undp.org/), and the UK's National Coordinating Centre for Public Engagement (visit https://www.publicengagement.ac.uk/do-engagement/evaluating-public-engagement/evaluation-resources).

Videos

To view these videos, search their titles on YouTube.

1. *Drug use prevention - school programming and protective factors | NCLEX-RN | Khan Academy*.
2. *Growing Up with Addiction and/or Mental Health Disorders - Prevention by Targeting Families*.
3. *Addiction Prevention - Prevent Addiction Early By Understanding How It Is Born*.
4. *CV-1407YTPart1* (12-Core Functions of Substance Abuse Counseling). Breining Institute.
5. *Program Evaluation Overview*. Stanford LEAP.
6. *Lecture 13: Program Evaluation*. Charlie Collins.

JOURNALS AND CONFERENCES

Journals

A few peer-reviewed journals focus on addiction prevention. They are included in the folowing list. Evaluation now has over 188 professional associations at the national and regional level worldwide (International Organization for Cooperation in Evaluation, 2018). Several of these associations have created journals and offered conferences. Eval Community (visit https://www.evalcommunity.com/), for example, lists approximately 30 journals that deal with evaluation research.

1. *Journal of Addiction & Prevention.* Quoted from website: "*Journal of Addiction & Prevention* is an online peer reviewed Open Access journal that encompasses all the habits that leads to addiction, such as tobacco, alcohol, narcotics, illicit drugs and behavioral addictions and focuses on latest and innovative research pertaining to preventive measures." Visit https://journals.indexcopernicus.com/search/details?id=32202
2. *Journal of Addiction and Preventive Medicine*. Quoted from website: "An international online, open access, peer reviewed journal that focuses on basic science, and clinical aspects of addiction. Additionally, it highlights the efforts of preventing addiction in the population at large and accepts articles related to that. The journal will accept manuscripts from clinicians such as physicians, psychologists, therapists, social workers in the field of Addiction Medicine as well as basic scientists." Visit https://www.elynsgroup.com/journal/journal-of-addiction-and-preventive-medicine
3. *Substance Abuse Treatment, Prevention, and Policy.* Quoted from website: "*Substance Abuse Treatment, Prevention, and Policy* is an open access, peer-reviewed journal that encompasses research concerning substance abuse, with a focus on policy issues." Visit https://substanceabusepolicy.biomedcentral.com/
4. *American Journal of Evaluation.* Quoted from website: "Each issue of the *American Journal of Evaluation (AJE)* explores decisions and challenges related to conceptualizing, designing and conducting evaluations. Four times/year it offers original, peer-reviewed, articles about the methods, theory, ethics, politics, and practice of evaluation." Visit http://aje.sagepub.com/
5. *Canadian Journal of Program Evaluation (CJPE).* Quoted from website: "Dedicated to the advancement of evaluation theory and practice." Visit https://evaluationcanada.ca/canadian-journal-program-evaluation

6. *Evaluation and Program Planning.* Quoted from website: "*Evaluation and Program Planning* is based on the principle that the techniques and methods of evaluation and planning transcend the boundaries of specific fields and that relevant contributions to these areas come from people representing many different positions, intellectual traditions, and interests." Visit http://www.journals.elsevier.com/evaluation-and-program-planning
7. *Evaluation: The International Journal of Theory, Research and Practice.* Quoted from website: "Over the last two decades, evaluation has become a major issue for academics, governmental and public organizations and businesses throughout the world. This has, however, resulted in a body of knowledge scattered across disciplines, professions and countries. To promote dialogue internationally and to build bridges within this expanding field, *Evaluation: The International Journal of Theory, Research and Practice* was launched in July 1995. Visit https://us.sagepub.com/en-us/nam/journal/evaluation

Conferences

Not all the following conferences are only on the topic of prevention. If you are interested in the prevention of a particular addiction, please see the section called Conferences in Chapters 9 through 21.

1. National Prevention Network. http://npnconference.org/
2. Substance Use Prevention Conference. https://actmissouri.org/events/annual-events/prevention-conference/
3. North Carolina Substance Misuse Prevention Conference. http://www.ncparentresourcecenter.org/ncprc-conference/
4. New Jersey Prevention Network Annual Addiction Conference. https://10times.com/new-jersey-prevention-network-annual-addiction
5. National Institute on Drug Abuse. https://www.drugabuse.gov/news-events/meetings-events/upcoming-meetings-events
6. American Society of Addiction Medicine. https://www.asam.org/

Below are a few of the organizations that host annual evaluation conferences:

1. American Evaluation Association. See website for details.
2. Canadian Evaluation Society. See website for details.
3. European Evaluation Society. See website for details.
4. UK Evaluation Society. See website for details.
5. Australian Evaluation Society. See website for details.

INDIVIDUAL EXERCISES

1. Meet with someone who has conducted an evaluation. As suggested by Shannon and Cooper (2016), evaluators are within college and university departments and in the local community. Also, faculty need to conduct evaluations for funders of their research.
2. Evaluate a class in which you are enrolled. Write down the strengths of the instructor and the course content on one half of the page and write the weaknesses or areas for improvement of the instructor or course content on the other half. Provide a global rating as well: Would you recommend this course to other students? Why or why not?
3. Consider advertising that you hear on the radio, see on the television, or read in a magazine that is either promoting (or dissuading) use of a legal drug (i.e., cigarettes, alcohol, prescription medication) or dissuading people from using illegal drugs. If you were to evaluate this media campaign, how would you ascertain its strengths and weaknesses? What would you want to measure? For how long would you conduct the evaluation study?

CLASSROOM EXERCISES

1. Shannon and Cooper (2016) suggested meeting and having discussions with evaluation stakeholders. They suggested it would not be difficult to find evaluators as they are within college and university departments, faculty research, and in the local community. University administrators would be included. An individual who

conducts evaluations could be invited to class to offer a brief presentation followed by questions from the students that they have developed in advance.

2. Assign students to groups of three or four. Each group either picks or is assigned a small program to evaluate. These could be chosen from programs at your college or university or other services on campus.
3. First, divide the class into two. Provide all the students with a published evaluation. Have students on one side focus on the strengths of the evaluation and students on the other side concentrate on its weaknesses. Either have students write the strengths and weaknesses on the board or have the two teams debate these in class.

CHAPTER SUMMARY

After 30 years of programming aimed at prevention, the most salient conclusion is that "no single strategy has consistently demonstrated a long-term impact" (McNeece & Madsen, 2012, p. 180). It is also important to keep in mind that, although chronic drug use has a negative impact on employment, casual drug use does not for most individuals who admit to using illicit drugs (McNeece & Madsen, 2012).

Prevention programs are effective in some cases, whereas other programs actually increase drug use. The Institute of Medicine and the National Institute on Drug abuse have adopted a classification of prevention programs that differ based on the intended audience. *Universal prevention* targets the general population, *selective intervention* focuses explicitly on at-risk populations, and *indicated prevention* is aimed at those experiencing early signs of substance abuse and related problem behaviors. Different cultures evince varying degrees of risk factors and protective factors, which either promote or diminish addictive behaviors, respectively.

Prevention programs are expensive, and they need to demonstrate effectiveness. This chapter also focused on evaluation. There are several other reasons that evaluations are conducted besides prevention. Some of these other reasons were embedded within the different types of evaluation included, such as counselor evaluation, client evaluation, prevention evaluation, program evaluation, and treatment evaluation. Evaluation can enrich the quality of our programs and our counseling practices.

The chapter then moved into an overview of client assessment. Chapters 9 through 21 each has a section called Diagnostic and Assessment Considerations. That section of each chapter includes *DSM-5* criteria for those addictions currently recognized in the DSM system but also several assessments and screening instruments used for that particular addiction. Assessment in this chapter was reviewed more generally. Several valuable links to instruments useful in addiction counseling practice were also provided.

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