Chapter 32

ALCOHOL-RELATED DISORDERS

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Introduction

The process of fermentation occurs regularly in nature when sugars come into contact with airborne yeasts transforming them into a final product known as alcohol; however, alcohol use did not begin in earnest until the dawn of agriculture, when the types of sugars necessary for fermentation became available. The first alcoholic beverage, most likely date palm wine, originated in Mesopotamia. Through historical evidence, it is known that ancient Egyptians were alcohol drinkers; texts from this period referred to social problems associated with drunkenness. In Babylonian texts laws regulated drinking houses. The Romans worshipped Dionysus, or Bacchus, the god of wine. Greek literature abounds with warnings against intemperance – evidence of a people well acquainted with the health and social implications of excessive drinking. Even the Hebrew Bible cites references to alcohol consumption. Because of its ceremonial importance, overindulgence was frowned upon and alcohol consumption was under strict social control.

The prophet Mohammed banned alcohol partly to distinguish his followers from Christians and Jews. Alcohol remains prohibited by many Muslim traditions; many Buddhists and Hindu Brahmins also abstain for religious reasons. Alcohol's importance, however, has never been confined to the mystical. Throughout its history, alcohol has been used socially for many purposes such as calming feuds, providing courage in battle, sealing pacts, celebrating festivals, and seducing lovers (Holt, 2006). In medieval Europe more practical roles of alcohol included using it as a folk medicine and as a preservative. The abuse of alcohol, a substance long employed for its range of effects, is not new – ancient cultures were aware of its damaging potential.

Throughout the world religious groups and cultures condone, in various degrees, the use of alcohol. Logically, an increased likelihood of problematic drinking and alcoholism results from practices which more strongly advocate its use. From biblical times to the present, drunkenness has been condemned as degrading and perceived as a personal weakness. The general belief that those who frequently abused alcohol were lacking in moral character has continued to the present time (Schuckit, 2006).

Today, alcohol addiction is one of the most common addictions worldwide. Because of its legal availability and worldwide social acceptance, alcohol is relatively easy to abuse. The majority of those who consume alcohol do so at least once a week and for most people, regular drinking on a social level does not create a dependency on the substance (Carson-DeWitt, 2003). Alcohol addiction affects many people close to the alcoholic, including spouses, children, friends, employers, co-workers, and classmates.

According to the National Council on Alcoholism and Drug Dependence (NCADD, 2007), almost 18 million people in this country abuse alcohol. Yearly, more than 100,000 of these people die of alcohol-related causes. Alcohol is a factor in nearly half of all United States' deaths in car accidents. Alcohol-related problems range from mild to fatal. It is a major public health problem intricately connected with other social issues like crime, homelessness, teen pregnancy, and domestic violence (Donovan, 2005; Schuckit, 2006).

This chapter provides information about problem drinking and alcoholism. The conditions, causes, progression, and effects are addressed, along with current views about treatment approaches and recovery. Family issues and assessment are described; vocational rehabilitation, functional limitations, and

rehabilitation potential are discussed. The chapter also reviews factors that affect recovery and the vocational process, and concludes with a case study analysis.

Alcohol

Alcohol is a sedative-hypnotic drug with anesthetic properties. One drink whether it be 12 ounces of beer, 4 ounces of wine, or 1¼ ounces of distilled alcohol all contain about the same amount of alcohol. Medically, if a woman or man consumes one or two alcoholic drinks per day, respectively, they are over 21 years of age and not addicted, pregnant, otherwise ill, or taking medications that interact with alcohol, then their consumption is not classified as problematic.

Alcohol affects the system of neurotransmitters in the brain and has an inflammatory effect on living tissue. Once ingested, alcohol passes through the esophagus into the stomach and small intestine, where it is rapidly absorbed in the bloodstream. On an empty stomach, absorption of alcohol occurs in 40-60 minutes; foods high in fat content slow down this absorption. Due to differences in physiology, absorption into the bloodstream occurs more rapidly in women than in men; therefore, its effects are likely to be felt by females more quickly. Blood alcohol content is the concentration of alcohol in a person's blood stream; it is measured by mass per volume. The size and weight of the person drinking is a factor; larger, heavier people require greater amounts of alcohol to reach the same blood level percentage than smaller, lighter individuals (Bryant, Windle, & West, 1997; Schacht, 2006). As of July 2007, all 50 states in the U. S. have laws defining driving with a blood alcohol content at or above a level of 0.08% as illegal (Highway Loss Data Institute, 2007).

After alcohol enters the blood, it circulates throughout the body. The liver detoxifies (removes from the body) approximately 95% of the alcohol and the remaining 5% is excreted through the skin and lungs. Areas that are higher in water content (the liver, brain, pancreas, heart, and muscles) pick up more alcohol that do dryer tissues (bone). As the blood alcohol level rises, functions such as judgment, impulse control, and alertness are diminished. In part, the "high" that drinkers experience is due simply to a decrease in inhibition and a perceived relief from cares and worries.

As additional alcohol is consumed, blood alcohol level increases and further impairs one's ability to drive and perform other complex tasks. Researchers generally agree that for most people, impairment occurs when three or more drinks are consumed within an hour (Miller & Swift, 1999; Perez, 1992). Stimulant drugs (including caffeine) do not hasten the process. Annually, countless motor vehicle deaths involve drivers who have been drinking. Over the past 25 years, considerable efforts have been made to reduce the number of people driving "under the influence."

Problematic Patterns of Use

Problematic or unacceptable consumption of alcohol has been described in several ways, including misuse, abuse, dependence, and alcoholism (alcohol addiction). This section elaborates on these concepts to clarify the difference and identify approaches to treatment that are effective for various conditions.

Use and Misuse

Use is the occasional drinking of alcoholic beverages that does not result in significant impairment or adverse consequences. The "misuse" of alcohol includes drinking by minors, pregnant women (or those anticipating pregnancy), individuals using hazardous or moving machinery, and people driving motor vehicles. Additional misuse of alcohol includes drinking while engaged in any hazardous activities, drinking in the presence of an illness that contradicts the use of alcohol, and drinking in situations where it interacts with medications (Perez, 1992).

Alcohol Abuse

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) of the National Institutes of Health (2003) defined alcohol abuse as a maladaptive pattern of drinking that leads to clinically significant impairment or distress. An individual diagnosed with alcohol abuse drinks despite alcohol-related physical, social, psychological, or occupational problems. Alcohol abuse does not necessarily involve a consistent

pattern of heavy drinking, but is defined by the adverse consequences associated with the drinking pattern. These include failure to fulfill major obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use, substance-related absences, suspensions or expulsions from school, neglect of children or household).

Alcohol Dependence

The NIAAA (2003) defined alcohol dependence as being characterized by multiple symptoms including tolerance, signs of withdrawal, diminished control over drinking, as well as cognitive, behavioral, and/or physiological symptoms that suggest that the person continues to drink despite experiencing significant alcohol-related problems.

Alcoholism

Another term for alcohol addiction is alcoholism. The American Society of Addiction Medicine (ASAM) and the NCADD (2007) defined alcoholism as a primary, chronic disease that is often progressive and can be fatal. In historical use, alcoholism refers to any condition that results in the continued consumption of alcoholic beverages despite negative personal and social consequences. NIAAA (2003) stated that alcoholism is characterized by the following four symptoms: (1) craving, i.e., a strong need or urge to drink; (2) loss of control, i.e., not being able to stop drinking once drinking has begun; (3) physical dependence, i.e., the occurrence of withdrawal symptoms, such as nausea, sweating, shakiness, and anxiety after stopping drinking; and (4) tolerance, i.e., the need to drink greater amounts of alcohol to get "high."

Primary alcoholism is a term used to highlight alcoholism as an illness separate from and in addition to any other illnesses that may be associated with it. Primary also means that alcoholism, as an addiction or dependence, is not a symptom of another physical or mental illness.

Progressive and fatal alcoholism indicates that the illness persists over time and that physical, emotional, and social changes that result are cumulative. Tissue damage from alcoholism causes premature death due to disease of the liver, brain, heart, digestive system, and other vital internal organs. There is an increased risk of death or disability due to accidents, homicide, suicide, and other traumatic occurrences. **Impaired control** indicates an inability to limit alcohol use or the amount consumed when drinking, the duration of the episode, quantity consumed, and behavioral consequences of drinking. **Denial** includes a range of psychological maneuvers that limit or eliminate awareness that alcohol use is the cause of the problems. Alcoholics cannot recognize symptoms or results that seem perfectly clear to others (Galanter & Kleber, 1994; McCrady & Epstein, 1999).

Etiology

There is no single cause of alcoholism; causes of alcohol abuse, alcohol dependence, and alcoholism are multifaceted. Research has indicated that a genetic component may play a role in the abuse of alcohol (Begleiter & Kissin, 1995; Goodwin, 2000; Schuckit, 2006). For example, studies of identical twins show the son of an alcoholic father is four times more likely to become alcoholic than the child of a non-alcoholic father. Female children of alcoholics have an increased incidence of alcoholism and a much higher incidence of severe depression. Research indicates that there are changes in brain waves of children of alcoholics similar to those found in their alcoholic fathers, and genetic influences in the pattern of adolescent alcohol tolerance.

Aside from possible genetic factors, environmental and cultural influences play significant roles in substance abuse (Alters, 2007). In general, in groups or populations where heavy use of alcohol is more accepted, a greater number of incidences of alcoholism are found. There is no evidence of "an addictive personality," and no valid tests exist to predetermine one's predisposition to addiction. Certain personality characteristics develop during addiction (Powers & Dell Orto, 2004). Family history of addiction and prior addiction to other drugs, including tobacco, are strong predictors of alcoholism (Ruben, 2001).

Today, the concurrent use of alcohol and other drugs is an increasing problem (Schuckit, 2006). Many people who drink use other recreational or prescription drugs including sedatives, stimulants, diet pills, and marijuana. Combining alcohol with such intoxicants can result in synergistic and additive

interactions, with a greater incidence of disruptive effects. When multiple substances are used, withdrawal and recovery are complicated, prolonged, and more likely to require professional care in the early period of recovery. Additionally, for people who use alcohol with other drugs, the risk of early relapse is high.

Rehabilitation counselors and other helping professionals must possess a clear understanding of a client's alcohol and other drug use. Current alcohol abuse affects motivation and impairs physical and emotional recovery from other illnesses. Frequently, the state of the person's alcohol use may not have previously been assessed or diagnosed. When alcohol abuse is suspected, assessment by trained personnel can determine the extent of the problem and whether it is concurrent with another illness (dual diagnosis).

Effects

The primary negative effects of alcoholism occur with use of the substance in excessive and damaging amounts. The secondary damage caused by the inability to control alcohol consumption is manifested in many ways. It is common for a person with alcohol-related problems to drink well after physical health problems surface. Such negative effects include cirrhosis of the liver, pancreatitis, polyneuropathy, alcoholic dementia, heart disease, cancer, nutritional deficiencies, sexual dysfunction, and even death.

Social Effects

The social problems arising from alcoholism are significant (Holt, 2006). Inebriation or its counterpart, a "hangover," during hours of employment can result in job termination. This can lead to immediate or eventual financial problems, including the loss of living quarters (Corley, Lawton, & Gray, 2005). Behavior caused by reduced judgment from alcohol consumption can have legal consequences, such as criminal charges or civil penalties. An alcoholic's behavior and mental impairment while drunk can profoundly impact family and friends, possibly leading to marital conflict and divorce, or contributing to domestic violence. This can damage the emotional development of the alcoholic's children, either immediately or even after they reach adulthood.

Medical Issues and Illness

All human tissues are negatively affected by alcohol use and prolonged alcoholism can lead to a variety of illnesses (Bertha, 2006). Alcohol alters neurotransmission and gradually alters neuronal structure. Ingestion of alcohol leads to slowed reaction time, impaired judgment, and loss of inhibition. Balance, learning, memory, and cognition are affected. Blackouts (amnesia for events which transpired while intoxicated) are a serious and advanced sign of the negative effects of alcohol on the nervous system.

Prolonged alcohol abuse may lead to disease states affecting nearly every system of the human body. Alcohol's affect on the gastrointestinal system includes bleeding throughout the gastrointestinal tract (especially the esophagus and stomach), acute inflammation of the pancreas or pancreatitis, acute and chronic liver disease, gallbladder and bile duct disease, and ascites (swelling of the abdomen). The genitourinary system is affected by bladder and prostate problems. The cardiovascular system is affected by high blood pressure, irregular heart beats, and alcoholic cardiomyopathy which may result in heart failure. The lungs can be affected by aspiration pneumonia (when stomach contents end up in the lungs) and sleep apnea.

Alcohol-related disorders affect the nervous system and the emotions. Frequent alcohol-related problems include anxiety, loss of concentration, short-term memory loss, blackouts, increased headaches, sleep disorders, fatigue, impaired judgment, loss of impulse control, and depression (Brozner, 2006). Sexuality and intimacy are affected; hormonal and emotional changes affect sexual performance, as well as the ability to maintain relationships. Sexual "acting out" or compulsive sexuality sometimes occurs as a result of alcohol abuse and dependence. Skeletal system effects include osteoporosis and damage from falls and accidents, including fractures and burns. Many illnesses are caused or complicated by alcoholism, and recovery from illness becomes more difficult with its continued use (Miller & Swift, 1999).

Diagnosis

Frequently, hospital records of the alcoholic include a diagnosis of alcoholism. Such a diagnosis, however, may not have been made or recorded prior to an interview by the rehabilitation counselor. Many screening devices and questionnaires have been developed for this purpose. A skilled interviewer may use any of these instruments to do an assessment. Alcoholics are not accurate in reporting their own alcohol use or its effects. Questions addressing symptoms and experiences rather than quantity consumed are likely to reveal a more accurate assessment. Use of the following **CAGE** interview items may be helpful to enhance non-judgmental questioning of the individual (Beresford, Blow, Hill, Singer, & Lucey, 1990; Ewing, 1984):

Have you ever **C**ut down on your drinking?

Do you get **A**nnoyed when your drinking is criticized?

Do you feel **G**uilty about your drinking?

Do you use alcohol as an **E**ye-opener? (A drink first thing in the morning to get going).

A single positive answer raises suspicion concerning alcohol abuse or dependence. Although alcoholics are not likely to be accurate or candid about the actual amount used, any individual who notes having more than 14 drinks in a week or more than five drinks on any one occasion, is positive for abuse or dependence. Historical information can also be obtained from the family or significant others.

The rehabilitation counselor is unlikely to see a person in acute withdrawal. This condition is characterized by symptoms including hallucinations or delusions, rapid pulse, increased agitation, anxiety, excessive sweating, hand tremor, nausea, and vomiting. An individual with these symptoms may require immediate emergency medical attention.

Treatment

Treatments for alcoholism are varied. Those who approach alcoholism as a medical condition or disease recommend different treatments than those who approach the condition as one of social choice. In general, most treatments focus on helping people discontinue their alcohol intake. These treatments include life training and/or social support strategies to help them avoid a return to alcohol use. Since alcoholism involves multiple factors which encourage a person to continue drinking, each must be addressed individually to successfully prevent a relapse once drinking is stopped (Perez, 1992; Schuckit, 2006).

Detoxification

Alcohol detoxification is only the first step in recovery. Although symptoms of withdrawal are treatable, addiction, which has both physical and mental characteristics, must be treated over an extended period of weeks or months. While some alcoholics can stop drinking for a period of time (days, weeks, or even months), alcoholic drinking generally recurs. Rarely, people who show signs of alcoholism are able to maintain prolonged abstinence without assistance (Stimmel, 2002). For most people alcoholism is a life-long problem and extensive treatment is required. Studies (O'Connell, 1998; Perkinson, 2004) have shown that a minimum of nine months is necessary for a stable recovery. Because a return to asymptomatic drinking is unlikely, the commitment to long-term abstinence is needed to prevent further alcohol-related problems. Sobriety is achieved by many through regular participation in a recovery program such as Alcoholics Anonymous (*Alcoholics Anonymous***,** 2001; *The Twelve Steps and Twelve Traditions***,** 1981).

The American Society of Addiction Medicine published an excellent document called the Patient Placement Criteria-II-R (PPC-II-R) (Gartner, Mee-Lee, & Shulman, 2001), which has been adopted by many states and several federal government agencies. The PPC-II-R outlines whether a person could be safely detoxified at home or needs a non-medical social model or a medically supervised program. Following detoxification, a client may require an ongoing structured living environment such as a recovery home. Utilization of these resources generally enhances recovery.

Withdrawal ranges from mild to severe (life threatening) and sedative hypnotics, such as the benzodiazepines and barbiturates, decrease the symptoms of withdrawal. When these drugs are not used, a process of "kindling" may take place in the brain, making it more sensitive to future withdrawal syndromes.

"Hangovers" are the mildest form of alcohol withdrawal syndrome. They usually consist of nausea, headache, thirst, and dysphoria (exaggerated feelings of depression and unrest). Additionally, tremulousness and irritability may be present. Moderate withdrawal symptoms include severe agitation, tremulousness, irritability, insomnia, difficulty concentrating, anxiety, and increased dysphoria. Symptoms arise as early as two to four hours after the last drink and reach a peak within 12 to 72 hours. Occasionally, tonic clonic (grand mal) seizures (usually one, but can be multiple) occur during this time.

The most severe form of the alcohol withdrawal syndrome is delirium tremens (DTs). This consists of delirium, increased pulse rate, elevated blood pressure and body temperature, and severe agitation. Delirium tremens has a mortality rate of about 10%; early and intense medical intervention is required. Cardiac arrhythmia can occur during withdrawal from alcohol. Treatment for all stages of alcohol withdrawal syndrome includes large doses of thiamine (Vitamin B1), sedative hypnotics, fluids, multivitamin supplements, and rest. Most people do not go through detoxification in hospitals but do so at home or in "social model" recovery homes. Symptoms of mild withdrawal usually last for two to three days; more severe withdrawal syndromes last much longer (Goodwin, 2000).

DTs usually begin three days after the last drink and can be severe for five to ten days. Seizures may occur for two weeks after the last drink, although they usually are experienced within the first three days. Multiple medications have been used during withdrawal to minimize prolonged abstinence syndrome and seizures; the use of thiamine and sedative hypnotics is the most effective (*Hatherleigh Guide*, 1996; Stimmel, 2002). The goal is to become free from all chemicals that have the potential for addiction.

Medications

Although not necessary for treatment of alcoholism, a variety of medications may be prescribed as part of treatment. Some may ease the transition to sobriety, while others cause negative physical symptoms when alcohol is used. In most cases, the desired effect is to help an alcoholic abstain from drinking (Brozner, 2006; Gray, 2004).

Antabuse (disulfiram) prevents the elimination of acetaldehyde, a chemical the body produces when breaking down ethanol. Acetaldehyde itself is the cause of many hangover symptoms from alcohol use. The overall effect is severe discomfort when alcohol is ingested, causing an extremely fast-acting and long-lasting hangover. These results are intended to discourage an alcoholic from drinking while in recovery. Heavy drinking while on antabuse can cause severe illness and result in death.

Naltrexone is a competitive antagonist for opioid receptors, effectively blocking a person's ability to use endorphins and opiates. It also appears to act on glutamate neurotransmission. Naltrexone is used in two very different forms of treatment. The first treatment uses naltrexone to decrease cravings for alcohol, thus encouraging abstinence. The other treatment, called pharmacological extinction, combines naltrexone with normal drinking habits to reverse the endorphin conditioning that causes alcohol addiction. Naltrexone comes in two forms. Oral naltrexone is a pill and must be taken daily to be effective. Vivitrol is a time-release formulation that is injected once a month.

Acamprosate (also known as Campral) is thought to stabilize the chemical balance of the brain that would otherwise be disrupted by alcoholism. The Food and Drug Administration (FDA) approved this drug in 2004, stating "While its mechanism of action is not fully understood, Campral is thought to act on the brain pathways related to alcohol abuse..." (FDA Approves New Drug for Treatment of Alcoholism, 2006). While effective alone, it is often paired with other medications to improve success.

Sodium oxybate is the sodium salt of gamma-hydrooxybutyric acid (GHB). It is used for both acute alcohol withdrawal and medium to long-term detoxification. This drug enhances GABA neurotransmission and reduces glumatate levels. *Baclofen* has been shown in animal studies and small human studies to enhance detoxification.

Recovery Process

Detoxification treats withdrawal symptoms but does not resolve the illness of alcoholism or alcohol dependence (Carson-DeWitt, 2003). Rapid recovery usually occurs during the first week of abstinence manifesting in physical and cognitive improvements. Recovery is affected by factors such as severity and

duration of alcohol dependence, age, concurrent emotional and physical diseases, and intensity of medications used to help withdraw the person from alcohol. During the first three weeks of abstinence, cognitive abilities and emotional stability rapidly improve, and continue to do so at a slower rate for the first two years of abstinence. Cognitive improvement persists as long as five years and, at a lesser rate, for as long as ten years while brain tissue heals from injuries caused by alcohol.

Alcoholics Anonymous

Alcoholics Anonymous (AA) is a fellowship of men and women who share their experiences of strength and hope with each other to resolve their common problem and help others recover from alcoholism (Gray, 2004). The only requirement for membership is a desire to stop drinking. There are no dues or fees for AA membership; it is self-supporting through voluntary contributions. Alcoholics Anonymous is not allied with any sect, religion, political group, organization, or institution. An AA member's primary purpose is to stay sober and help other alcoholics achieve sobriety (Cheever, 2004).

The 12 steps of AA were put into written form in 1938 and elaborated in 1981 (Cheever, 2004; *The Twelve Steps and Twelve Traditions*, 1981).

1. We admitted we were powerless over alcohol, that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God as we understood Him.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed, and became willing to make amends to all of them.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as a result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

Of great importance in AA is service to other alcoholics and practicing a program of complete honesty, tolerance, and service in daily living. Recovery in AA is viewed as a life-long process, requiring consistent effort and regular involvement in the organization. AA does not profess to be for everyone or the only answer to the alcoholic illness. Its effectiveness as a recovery program is widely accepted by the helping professions, the judiciary, and AA is attested to by hundreds of thousands of sober alcoholics world wide (*Alcoholics Anonymous*, 2001; *The Twelve Steps and Twelve Traditions*, 1981).

A Chronic Disease

Alcohol dependence is a chronic disease that is subject to relapse. A relapse should not be viewed as a treatment failure, but rather as a symptom of the illness. Though never desirable, relapses can be therapeutic in that, if properly handled, re-enforce the need for sobriety. With prolonged or repeated relapses, however, recovery becomes increasingly difficult. A person who has met the criteria for the illness of alcoholism rarely can return to moderate drinking on any consistent basis. Individuals recovering from alcohol dependence must abstain from alcohol totally to ensure the best recovery outcome.

Dual Diagnosis or Co-Occurring Disorders

Individuals who experience a dual diagnosis are often faced with a wide range of psychosocial issues and may experience multiple interacting illnesses. The term "co-occurring disorders" is becoming a common term to refer to dual diagnosis, or co-occurring substance abuse disorders and psychiatric or emotional illnesses.

Dual Recovery Anonymous (an independent, self-help fellowship) defines "dual diagnosis" as meaning that an individual has two separate but very interrelated diagnoses:

1. A psychiatric diagnosis.
2. A substance abuse diagnosis, which may include both drugs and alcohol.

A dual diagnosis occurs when an individual is affected by both alcoholism and an emotional or psychiatric illness. Both illnesses may affect an individual physically, psychologically, socially, and spiritually. Each illness has symptoms that interfere with a person's ability to function effectively, and interfere with relating to self. Not only is the person affected by two separate illnesses, but they interact with one another. The illnesses may exacerbate one another. Symptoms can overlap and even mask each other making diagnosis and treatment more difficult. An individual may sincerely try to recover from one illness and not acknowledge the other. As one neglects his or her mental illness, that illness may recur. This recurrence may, in turn, lead a person to feel the need to "self medicate" through alcohol use.

Although a person's initial use of alcohol may have been a self-medicating drug for a physical or emotional disorder, once developed, alcohol dependence and alcoholism are classified as primary diseases. The presence of another illness or disorder may be masked by alcohol use, and the ability to diagnose or treat the other disease may not emerge for weeks or months after withdrawal from alcohol (O'Connell, 1998). Thus, alcoholism must be treated first.

With emergence of another disorder, additional treatment is required. If the additional disorder is psychiatric, it can be treated simultaneously with the alcoholism. A person diagnosed as having two disorders requires treatment for both. However, some emotional symptoms present in the first days or weeks of sobriety that appear to be symptoms of a separate emotional disorder may diminish or resolve with continued treatment for the alcoholism. As a result, counselors must remain alert for emerging symptoms of psychiatric disorders to diagnose and treat them effectively.

Alcoholism as a Family Disease

Living with a person who is alcohol dependent has powerful emotional repercussions. Families and close associates of individuals with this disease should seek support systems that provide information and counseling. ALANON, a group mutual-help program for adult relatives and friends of alcoholics, enhances such support. Similar 12-step oriented programs exist for children of alcoholics. If an alcoholic is not willing or able to become sober and maintain sobriety, support groups help the family to free themselves of the emotional bonds of guilt, hopelessness, and despair which are often felt by individuals connected to those with alcoholism (Brown & Lewis, 1999; Ruben, 2001).

Human resource departments frequently provide emotional and referral information about alcoholism. The local chapter of the National Council on Alcoholism and Drug Dependence, for example, provides referral to Alcoholics Anonymous, ALANON, and other recovery support programs, as well as information about addiction. Some universities maintain referral lists of local recovery agencies. Counselors need an awareness of the role of AA and other treatment programs; a visit to local programs for information, including referral criteria, is recommended to provide further support for clients in recovery.

Assessment for Rehabilitation Services

Generally, individuals in treatment for alcoholism are not referred for vocational rehabilitation during the initial phases of treatment (detoxification period or during the first month of treatment) (Alters, 2007). Persons evaluated for vocational rehabilitation services should undergo an assessment procedure that is similar to that which is provided for other chronic illnesses and disabilities. Attention is given to physical and psychological limitations, work history, training and education, assessment of specific skills acquired, and areas of interest for employment. Many alcoholics have sporadic work histories, with numerous job and career changes. Some have a history of self-employment in the skilled trades or professions, which may have allowed for greater flexibility to accommodate periods of reduced functioning due to heavy drinking (*Hatherleigh Guide*, 1996). Certain jobs where alcohol and/or drugs are present, such as bartending and pharmacy technician, are contraindicated for people in recovery.

A proper assessment includes physical status, medical problems, psychosocial functioning, functional limitations, the nature of current treatment, and whether or not the individual is still drinking. If currently sober, questions need to be asked regarding efforts to remain sober. Many people with alcoholism have had experiences in treatment with varying degrees of success. Because alcoholism is a chronic disease, many recovering alcoholics do not achieve or maintain long-term sobriety on their first attempts (Barrett, 1996). Vocational rehabilitation may be deferred for persons who are repeatedly relapsing or unable to maintain sobriety.

During an assessment for rehabilitation services, special attention is given to attitudes toward work and career. Overall, persons in the early stages of recovery may not have the ability to make accurate self-assessments of their capabilities and limitations. Thus, the rehabilitation counselor and others involved with treatment and recovery play a key role in developing accurate evaluation regarding motivation to return to gainful employment.

Vocational Rehabilitation

In the early stages of recovery many alcoholics need work levels that are less demanding, stressful, and potentially less rewarding than the employment performed when at maximum functioning. Focusing on the acquisition of appropriate work habits and a more stable work history are positive initial vocational rehabilitation goals for the recovering alcoholic; the specific job chosen is less crucial. Likewise, job finding and retention skills are an integral part of the vocational rehabilitation program. Changing attitudes toward work and maintaining employment is a considerable challenge for alcoholics during the first year or two of recovery. Because career progress can be initially slow and challenging, several years are often required before a person reaches his or her "maximum career success." Alcoholics often display impatience with this slow progress in their careers. Work stability is a primary goal; the counselor needs to stress that work habits and attitudes have more to do with success than any specific experience in an occupation. Overall, maintenance of sobriety is considered the first priority (Brown & Lewis, 1999).

Need for Retraining

Because some individuals lack marketable vocational skills, they have difficulty obtaining work appropriate to their age and educational background. Once stable sobriety is achieved, job retraining is frequently needed. Many recovering alcoholics indicate considerable interest in returning to school to complete education they abandoned at an earlier time. As with anyone in society, the acquisition of marketable skills is essential.

Living and working without alcohol can be an anxiety filled and apprehensive experience. Once familiar activities may seem new and difficult. As a result, many alcoholics have lost confidence in their ability to adequately perform past work at any skill level. If one experienced failure at work, due in part to alcohol and drinking-related problems, there will be increased anxiety and stress related to return to work (Alters, 2007; Schuckit, 2006). From the beginning of the assessment through long term and stable employment at the highest level achievable, the counselor's office is a safe place for the person to talk about fears and discuss realistic, attainable goals. Counselors provide assistance by placing prior experiences in the proper context. Honest feedback, along with encouragement from the counselor, is beneficial in correcting misperceptions. The person needs to view his or her occupation as only one part of recovery – which requires time and patience. Retraining can thus be a way to "ease into" a return to work.

Vocational Rehabilitation and the Recovering Alcoholic

Vocational rehabilitation counselors occupy a central role during recovery. To be of assistance, they must possess familiarity with the difficulties facing the recovering alcoholic. Counselors may become involved in assisting recovering alcoholics at any point in the recovery process following initial detoxification, depending on the setting where recovery takes place. Hospital-based programs, for example, may either have a rehabilitation counselor on staff or refer clients for state-provided vocational rehabilitation services. Similarly, non-medical or social model recovery programs, such as 12-step oriented recovery homes, have staff trained to provide vocational exploration and counseling (Schuckit, 2006).

When the client's identified disabilities do not include alcoholism, but whose current drinking affects abilities to maintain employment, the counselor may have to take the lead in addressing the alcohol use, although it is not an "identified disability." As a result, it is necessary for the counselor to acknowledge the reluctance a person has in facing the recovery process. In some cases, a formal "intervention" is required, which results in a structured confrontation by several persons who are closely involved with the individual (*Hatherleigh Guide*, 1996).

Untreated Alcoholism in Disability Clients

Persons with active alcohol problems are more likely to have industrial accidents and chronic illnesses that lead to disability. The identified disability may not include the alcohol abuse or dependence – which is often undiagnosed or hidden. Additionally, the pain and injury associated with some illnesses and injuries can lead to excessive use of pain medications which may then lead to an increased use of alcohol. If undiagnosed alcoholism is present and not appropriately treated, it presents a virtually insurmountable obstacle to successful rehabilitation. When a counselor suspects alcohol abuse or dependence, directly confronting the client may not be helpful (Alters, 2007). The person will likely deny or minimize the extent of use of alcohol or pain medication, unable to see any connection between the demands of rehabilitation and the use of drugs. Assessment by a professional qualified in addiction counseling is helpful in this situation; the rehabilitation counselor should seek out an appropriate referral early in the process. Community resources, such as the local chapter of the National Council of Alcoholism and Drug Dependence, are available for referral information (Leonard & Blane, 1999).

Functional Limitations

Physicians knowledgeable about addictions can help determine what residual functional limitations, emotional and physical, are present in individuals who are recovering from substance abuse (Bryant el al., 1997). The rehabilitation counselor needs to assess a person's (a) ability to work effectively both with others and with supervisors; (b) limitations due to mood or emotional disorders ("dual diagnosis") (O'Connell, 1998); (c) ability to work independently without close supervision; and (d) capacity to tolerate stress.

Some late-stage alcoholics become overly dependent on others and are unable, at least for a time, to work independently. These individuals can benefit from more structured work settings to make the successful transition to gainful employment. The recovering person also faces a decreased tolerance for stress during the first months of return to work, and this may continue for up to two years of sobriety. Employment involving low stress during the early months of a person's sobriety is likely to result in a more successful transition. Recovering alcoholics, however, may feel irritated at the necessity of performing work "beneath" their self-perceived capabilities. Positive feedback, like reassurances that this process is necessary, is beneficial for the person's recovery.

Though complete recovery from alcoholism leaves few specific functional limitations, the recovery to maximum functioning is slow and gradual, occurring over several years. A return to productive employment improves one's overall recovery by enhancing self-esteem and beginning the process of resolving financial difficulties (Brozner, 2006). It is for this reason that some recovery programs emphasize an early return to some type of work, generally beginning after one month of participation and sobriety. This is standard practice in alcohol recovery home settings.

Rehabilitation Potential

Assessment of the potential for rehabilitation is a challenging task for counselors. Clearly, many factors affect rehabilitation potential including age, educational background, prior work history, functional limitations, and motivation to work. Though not always immediate, most recovering alcoholics are eventually able to return to productive employment. Factors likely to affect the potential for effective participation in vocational rehabilitation include (a) length of sobriety and active participation in a recovery program; (b) history of relapses and their frequency; (c) commitment to maintaining sobriety; and (d) residual functional limitations (physical, cognitive, and emotional) resulting from the alcoholism or other chronic conditions (Goodwin, 2000; Carson-DeWitt, 2003). Once sober, the recovering alcoholic needs to

demonstrate the same traits as any other person in rehabilitation, including willingness to accept responsibility for behavior, personal well-being, capacity to meet vocational expectations, and personal determination to succeed.

Most alcoholics demonstrate moderate rehabilitation potential and eventually return to gainful employment because of financial necessity. Functional limitations diminish over time with continuous sobriety and active participation in an on-going recovery program. Those with repeated arrests for more serious legal charges present special challenges for rehabilitation; yet, there are surprising, unexpected recoveries. Individuals on probation or parole need coordinated efforts with the legal system.

Emotions and Attitudes Affecting Vocational Rehabilitation

Paradoxically, the alcoholic who has been seeking a "high" from drinking often experiences intense, negative emotions as consequences of prolonged drinking. These feelings include depression, guilt, exaggerated fearfulness, anxiety, intense loneliness, and feelings of emotional isolation (Perkinson, 2004). Frequently, some of these intense negative emotions are present in the early months of sobriety, and may recur periodically for many years, with reduced frequency and intensity. During the first months of recovery, coping with these intense emotions can be extremely difficult. Participation in recovery programs that emphasize interpersonal interactions is most effective in regulating the emotional extremes.

Alcoholics use alcohol to block out or sedate negative perceptions and feelings, especially anger, resentment, and fear (Brozner, 2006). Because these emotional responses are not "processed," the person may experience alienation from self and others. Newly sober alcoholics often display child-like responses to precarious situations and lack adult maturity and emotional balance. Impatience, low frustration tolerance, and explosive or excessive emotional reactions are common (*Hatherleigh Guide*, 1996).

Rehabilitation counselors need to understand and be familiar with the difficulties faced by recovering alcoholics. They may test the patience of most counselors by being manipulative and untruthful. Alcoholics in recovery are often highly sensitive to feeling "judged." Clearly, appropriate counseling precludes being judgmental. A recovering person often responds to negative, judgmental attitudes in a strong way and becomes angry, wishing to withdraw from the situation (Frances, Miller, & Mack, 2005). This response requires the counselor's intervention, suggesting alternative ways to deal with frustration, anger, and anxiety.

Improvement in coping with emotions and negative attitudes is noticeable within the first few months of recovery, though more permanent changes require time (*Alcoholics Anonymous*, 2001). Although progress is noticeable early in recovery, it is unrealistic to expect a person with many years of alcoholism to be fully recovered in a few weeks or even several months. The counselor must regularly acknowledge the long-term nature of recovery. Additionally, when depression or severe anxiety persist, or other signs of emotional illness evolve, referral to a mental health professional experienced in substance abuse counseling is appropriate.

Conclusion

Alcohol consumption has negative consequences for not only the health and well-being of the client, but also the health and well-being of those around him or her. Alcohol addiction is common and costly while imposing a negative impact on all aspects of the individual's life. Alcoholism is a disease in a sense that once an alcoholic drinking pattern is present, if left untreated, the severity and consequences of drinking are generally progressive and sometimes fatal. Although the effects vary widely, detoxification from alcohol is the first step to recovery. The desired goal is to abstain from drinking and maintain sobriety. Rehabilitation counselors need to understand and familiarize themselves with the process, stages, and difficulties facing both recovering alcoholics and clients whose current drinking affects the ability to maintain employment or return to work. Appropriate interventions and holistic supports are the keys to rehabilitation for individuals with alcohol-related disorders.

Case Study

Sally, a 32 year-old woman, is currently undergoing detoxification at a local alcohol treatment center. Two previous attempts to become sober and maintain long-term sobriety have failed. She is married, although separated, and has two children, three and six years of age. The present attempt at sobriety was prompted by the departure of her husband as a result of her continued drinking behaviors. The children are living with her mother in a nearby city.

There is a history of alcoholism in Sally's family. Her father was a diagnosed alcoholic and died at age 47, the result of physical complications resulting from alcoholism. The mother's present husband was previously married to an alcoholic. Sally states that her parents are not sympathetic or supportive of her sobriety. Her parents indicate that they are willing to provide care for the children, but that Sally is not welcome in their home when she is drinking.

Drinking did not become a problem for Sally until she became an adult, although she began drinking at about the age of 12, drinking secretly from her father's stock of alcohol and enjoying the feelings she experienced. Drinking continued in high school. Once she was expelled from a school dance due to drinking. Serious trouble from alcohol consumption began during her freshman year in college; Sally experienced problems in classes due to absences. She had to move from her apartment on three occasions when her roommates refused to put up with her drinking. College life thus became impossible and Sally dropped out after the second term.

At the age of 20, Sally secured employment with a ticket agency, where she met and married a band musician. Six months later, she was divorced, again the result of her drinking and socially unacceptable behavior. She enrolled in an alcohol treatment program at the time of the divorce but left the program after five days. Continuing to drink, she was eventually fired from her job and returned home to live with her parents under the condition that she seeks help for her drinking problem. She attended several meetings at a women's center and enrolled in an outpatient treatment program at a local hospital. She continued participating in the outpatient program for three months, but stopped when she married her current husband, a produce manager at a local supermarket.

Sally controlled her drinking for the next eight years, during which time she gave birth to two children. During these years, she worked part-time at a local printing shop doing general office work. When she was 30, drinking again became a serious problem for Sally. While at home, she would drink secretly, but her practices soon became obvious to all around her. On several occasions, she would leave the children unattended to stay out all night. She lost her job, and the week after her 31st birthday, her husband left after she had destroyed much of the furniture at home in a drunken rage. Sally's parents took her and the children home and again insisted that she enter some type of treatment program.

Alcoholics Anonymous (AA) became Sally's support system; she attended meetings regularly but continued to drink. Her mother and stepfather eventually told Sally that she could no longer reside with them but that they would continue to care for the children until she regained the capacity to care for them. Sally was angry, frustrated, and hurt, but enrolled at a county detoxification center where she is currently seeking help from a counselor.

Questions

1. Identify any factors which might have contributed to Sally becoming an alcoholic.
2. What are the positive factors in this case for rehabilitation?
3. As Sally's counselor, identify the first three measures you would recommend.
4. In your intervention, how would you involve Sally's significant others?
5. What types of intervention would you suggest for this individual?

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