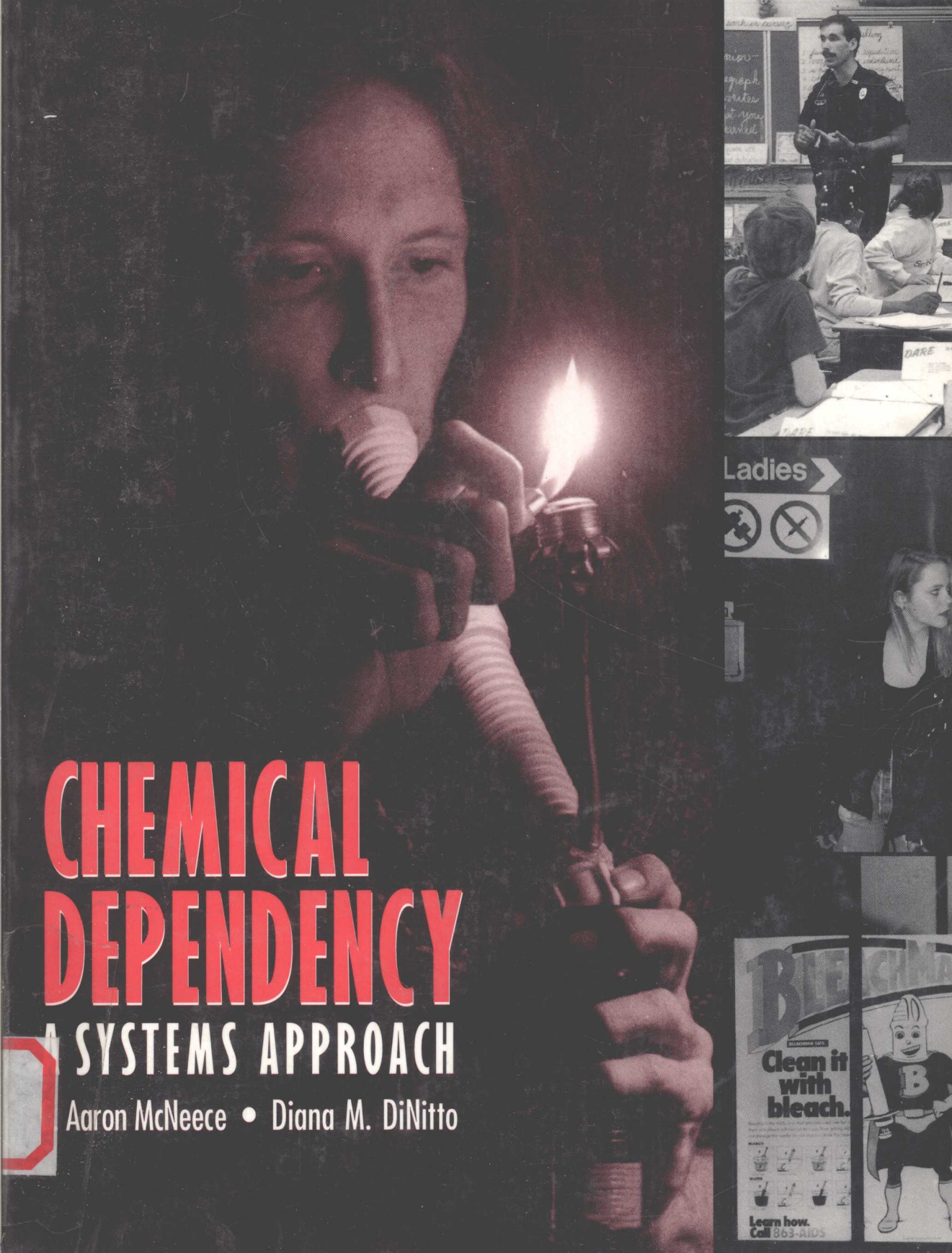

CHEMICAL DEPENDENCY

A SYSTEMS APPROACH

Aaron McNeece • Diana M. DiNitto

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A Systems Approach

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In memory of
Nadine McNeece
1914–1992
C.A.M.

For the DiNitto and Salvatore families
D.M.D.

PREFACE

Both authors of this text have taught courses such as "alcoholism and alcohol abuse," "drug abuse, addiction, and treatment" and "chemical dependency" for a number of years. We also have several years of experience working with chemically dependent clients in detox centers, halfway houses, outpatient services, juvenile training schools, adult prisons, and probation and parole programs. Both authors have additional experience in volunteer organizations, research efforts, and policymaking bodies regarding drug and alcohol abuse. The other contributors to this book also have valuable experience working with chemically dependent clients. This volume grew out of our desire to make available a single textbook providing a comprehensive, systems-based examination of the subject of alcohol and drug abuse, as well as the associated problems, policies, and programs. We have attempted to include all the essential components that social workers and other human service professionals would need to understand to work effectively with chemically dependent clients within the policy system that provides treatment and other services.

While we believe that this volume contains "state of the art" information regarding theory and practice with chemically dependent persons, it is in no way intended to serve as a substitute for competent, professional help for anyone with a substance abuse problem.

Part One of this text, Chapters 1 through 4, deals with theories, models, and definitions of abuse and dependency. We have tried to be as comprehensive as possible, and, therefore, we have included *all* those theories that have any credence within the scientific and professional communities. Our current level of scientific understanding does not provide definitive answers to such questions as "What *causes* chemical dependency?" We caution the reader that many practicing professionals adhere to particular etiological models with an ideological fervor. Although our biases may shine through the veneer of scientific objectivity in places, we have tried to present as balanced a perspective as possible. Thus we really do believe that alcoholism *is* a disease when discussing consequences such as pancreatitis and cardiomyopathy. There are other times when we find it more useful to view drug dependency as an addiction or an addictive behavior rather than a disease. If there seems to be some uncertainty here in the adoption of the "best" model, it reflects the state of knowledge in this field.

Part Two of our text concerns intervention, broadly defined. Chapter 5 describes the common processes of screening, diagnosis, and referral. Common treatment approaches and their effectiveness are examined in Chapter 6. Chapter 7 presents prevention theories

and describes current programs designed to prevent abuse or dependency. Chapter 8 of this part takes a *macro* approach to intervention, dealing with public policies regarding the manufacture, distribution, and use of psychoactive substances, as well as the social, economic, and political consequences of chemical dependency. Both the financing of treatment and the problem of drug-related crime are also covered in this chapter.

Part Three is devoted to special populations: children, families, ethnic groups, gay men and lesbians, dually diagnosed clients, older drug and alcohol abusers, and women. We apply some of the etiological theories described earlier in the text in attempting to explain the differential use of addictive substances by various groups, and we discuss some of the special problems that occur in these populations because of alcohol or drug use. In examining these populations, we try to link them to the larger systems and other subsystems in which they are connected—the community, the state, the church, the political system, the professions, the network of treatment agencies, et cetera. Chapter 10 takes a careful look at family systems theory, and Chapter 9 examines children within the context of both family and larger systems. Chapters 11 and 12 describe the special problems of substance abuse among ethnic minorities and in the gay and lesbian community. Chapter 13 examines dually-diagnosed clients; Chapter 14 looks at chemical dependency among the elderly. Gender issues and chemical dependency are covered in Chapter 15.

The final part summarizes major current issues, such as the decriminalization of some currently proscribed substances, and indicates some areas where our research efforts should be directed. Chapter 16 also examines the trends in service provision for chemically dependent clients, especially third-party coverage and managed care.

All the material contained in this text has been tested on students in our classes. Many thanks to them for a number of valuable suggestions. We also want to thank our families and Craig Deere for providing the caring environment that allowed this book to be written. A special note of thanks goes to Sherri McNeece for several of the photographs. Diana especially thanks Kelly Larson for her assistance in preparing the drafts of the manuscript. Thanks also to Louise Warren and Jane Kretzschmar for their helpful comments on some of the chapters; to Niaz Murtaza, Charles Austin, and Nancy Sonntag for their assistance with library research; and to Kathryn Webber, Laura Flora, and Phyllis Bassole for their help in completing this project.

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*Except where indicated, all chapters were written by C. Aaron McNeece and Diana M. DiNitto.

III Chemical Dependency in Special Populations

1

THEORIES, MODELS, AND DEFINITIONS

Perhaps the most difficult thing for the student of chemical dependency to understand is why one person can drink socially for a lifetime and never develop a "drinking problem," while another person may become addicted to alcohol after a very short period of social drinking; why most teenagers experiment with illicit drugs or are only occasional users, while some of their peers will become quickly and perhaps fatally addicted. The complexity of this process is why we devote the first four chapters to theories, models, and definitions.

Chapter 1 covers the most common definitions of terms such as drug use, drug abuse, addiction, dependency, alcoholism, problem drinking, and so on. At the heart of these different definitions is the ongoing dispute about whether alcoholism is an addiction, a disease, a behavioral disorder, or something else. In addition, this chapter defines the major classes of drugs and examines the epidemiology of alcohol and drug use.

We take a closer look at the major etiological theories in Chapter 2, including psychologic, biologic, and cultural theories, as well as a moral model. A multicausal model of drug use is examined, in an attempt to link together all the major factors that are thought to influence drug use.

Chapter 3 presents a "user's view" of the process of becoming addicted, while Chapter 4 discusses the physiological and behavioral consequences of alcohol and drug abuse. In both these chapters, we attempt to break down some of the more common myths and stereotypes regarding addiction and "addicts."

1

Definitions and epidemiology of alcoholism and drug addiction

In 1990 the estimated per capita consumption of alcoholic beverages by adults in the United States was 39.5 gallons. This is equal to a per capita consumption of 34.4 gallons of beer, 2.9 gallons of wine, and 2.2 gallons of distilled spirits.[1] "Heavy drinkers," about 10 percent of the drinking population, account for half this consumption. (Heavy drinkers are defined in the present context as those who consume 1 ounce or more of pure alcohol daily; moderate drinkers consume 0.22–0.99 ounce; light drinkers, less than 0.22 ounce daily.)[2] It is little wonder that there are 18 million "problem drinkers" and alcoholics in the United States. Neither is it surprising that half of all accidental deaths, suicides, and homicides are alcohol related.[3] What is surprising is that despite the pervasiveness of health, social, and economic problems associated with the use of alcohol, we have yet to agree just what alcoholism really is. Is it a disease, a behavior problem, an addiction, or something completely different?

In recent years we have become much more concerned with the presence of other types of "drugs" in our society. It was estimated that by the early 1980s, 20 million Americans were spending $18 billion on cocaine.[4] By 1979, 60.4 percent of all high school seniors were estimated to have used marijuana, and by 1985, 17.3 percent had used cocaine.[5] Approximately half a million

Americans were dependent on heroin, and worldwide production of opium poppies reached 1,573 metric tons in 1984.[6] Generally our attention to other drugs has been focused on illicit mood-altering substances, but there is growing concern with the use of prescription drugs (such as Valium and Darvon), over-the-counter (OTC) drugs, and drugs that have only slight mood-altering properties, but that present substantial health risks (such as tobacco). There are other substances that might not ordinarily be considered as "drugs"—inhalants and solvents (toluene, paint thinner, glue, etc.) and naturally occurring plants such as mushrooms, morning glory, and yage. Perhaps it might be more technically appropriate to speak of *substances* rather than *drugs*. On the other hand, the reasons that people generally use or abuse a particular substance are related to the specific drug contained in that substance. Tobacco is smoked because of its nicotine; khat is chewed because it contains cathinone; mushrooms are eaten for their psilocybin. Our primary focus in this book is with the most commonly used psychoactive drugs—those which alter mood, cognition, and/or behavior—whether obtained through legal or illegal means.

DEFINITIONS AND MYTHS

Alcohol is a chemical compound that, when ingested, has the pharmacological property of altering the functioning of the nervous system. Alcohol, along with barbiturates and benzodiazepines, belongs to a class of chemicals called *central nervous system (CNS) depressants*. These drugs are used medically in the induction of anesthesia and the reduction of anxiety. They are often referred to as sedative-hypnotics. There are actually several different types of alcohol, but the two most common types are *methyl alcohol* or *methanol* (the type we use as fuel for our cars) and *ethyl alcohol* or *ethanol* (the type we drink). Alcoholic beverages generally consist of ethyl alcohol (C_3H_7OH), by-products of fermentation known as congeners, colorings, flavorings, and water.[7] Beverage alcohol has been used by almost every known culture. Since any type of sugary fluid will ferment when exposed to omnipresent yeast spores, spontaneous fermentation is a common occurrence, and alcohol is a readily available pharmacological substance.

Technically, *cannabis* is also a CNS depressant, but it is usually treated separately in texts such as this because of the magnitude of the problems associated with it. Americans spent approximately $44 billion for marijuana in 1984. Between 30,000 and 60,000 tons of marijuana were imported in that year, and perhaps another 4,000 tons were produced domestically.[8]

CNS stimulants are drugs which in small doses produce an increased sense of alertness and energy, elevated mood, and decreased appetite. Included in this group are caffeine, cocaine, amphetamines, methamphetamines, and amphetamine-like substances such as Ritalin and Preludin.

Opiates are substances such as heroin, morphine, and codeine—opiods, synthetic morphinelike substances such as pethidine, methadone, and dipipanone. Small doses will produce an effect similar to that of the CNS depressants, but with somewhat less impairment of the motor and intellectual processes.[9]

Hallucinogens have the capacity to induce altered perception, thought, and feeling. Lysergic acid diethylamide (LSD), mescaline, and "magic mushrooms" with the ingredient psilocybin all produce these effects. Volatile solvents such as gasoline, benzene, and trichlorethylene can also produce effects similar to CNS depressants and hallucinogens when their vapor is inhaled.[10]

Disease, Addiction, or Behavioral Disorder?

The major definitional issue concerning chemical dependency is whether it is a bad habit, a disease, or a form of moral turpitude. It has been described as a product of the genes, the culture, the devil, and the body. Disagreements persist among professional groups as well as the public at large. The

various definitions of addiction are frequently driven by political motives, ideology, personal interest, and professional training. We will have much more to say about the nature of addiction throughout this chapter. The major reason for our concern is that appropriate and effective treatment of addiction must be predicated on a reasonably accurate description of the etiology of the phenomenon. We cannot effectively diagnose or treat that we cannot define. The best that we can do is deal with the outward symptoms of the problem.

The reader may have noticed terms in the body of literature on chemical dependency that have not been precisely defined: terms such as *alcoholism, addiction, use, misuse, abuse, dependency,* and *problem drinking.* These terms are more often used as descriptions of a state of affairs rather than explanations, and there is considerable variation in the meaning attached to each term by different writers. We will do the best we can in the following pages to define these terms. However, we will still have to live with some ambiguity. "Problems" and "abuse" frequently exist only in the eye of the beholder.

We are also concerned that when the term "disease" is used in a metaphorical sense, it may actually make treatment more problematic, especially when the metaphoric aspect is forgotten—as it usually is. Over the years poverty, pornography, obesity, family violence, and rock music have all been portrayed as diseases. It is doubtful that the disease label has helped to facilitate a "cure" for any of these conditions.

Alcoholism and drug addiction also are frequently regarded as a "family disease." The implication is that chemical dependency impacts the family *system.* We will discuss this idea at some length in Chapter 10. Whether it is a disease or not, there is little doubt that it dramatically affects not only the family, but all other systems of which the family is a subsystem, or with which families interact.

Alcoholism is one of those peculiar phenomena for which every layperson usually has his or her own working definition, and many laypersons think an alcoholic is "anyone who drinks more than I do." The layperson's definition of *alcoholism* usually does not differentiate *alcohol abuse* and *alcohol dependence.* Professionals working in this field do need to make these distinctions, and perhaps even finer ones. One astute observer has commented that it makes about as much sense to treat all alcoholics alike as to treat all persons having a rash in the same way. Imagine visiting the "rash ward" at your local hospital!

Contemporary scholars of alcoholism owe much to the earlier contributions of Jellinek and Bowman, who insisted that there were important differences between chronic alcoholism and alcohol addiction. The former covered all physical and psychological changes resulting from the prolonged use of alcoholic beverages. The latter was a disorder characterized by an urgent craving for alcohol.[11] According to their model, chronic alcoholism could exist without addiction, and addiction could occur without chronic alcoholism. Jellinek is usually identified as the most important researcher in making the disease concept of alcoholism scientifically respectable, but he also identified five separate types of alcoholism, thus demonstrating that the disease model was not a clear or unitary concept.[12]

According to Jellinek, *Alpha* alcoholics use alcohol to relieve physical or emotional pain more frequently and in greater amounts than are allowed under normal social rules. *Beta* alcoholics drink heavily and experience a variety of health and social problems because of their drinking, but they are not addicted to alcohol. *Gamma* alcoholics are characterized by loss of control over the amount consumed and by increased tissue tolerance to alcohol, adaptive cell metabolism, withdrawal symptoms, and craving. *Delta* alcoholics are similar to the gamma type, but they do not lose control over the amount consumed though they cannot abstain from continuous use of alcohol. *Epsilon* alcoholics are similar to gammas, but are "binge" or periodic drinkers.[13]

It should be noted that Jellinek's research was based on a questionnaire designed by members of Alcoholics Anonymous, distributed in the AA magazine *The Grapevine* and completed by only ninety-eight AA members. It could be very misleading to assume that all

alcoholics would fall into the same patterns as these AA members.[14] In his book *The Disease Concept of Alcoholism,* Jellinek also noted that a disease is "simply anything the medical profession agrees to call a disease."

The World Health Organization (WHO) defines alcoholism as "a chronic behavioral disorder manifested by repeated drinking of alcoholic beverages in excess of the dietary and social uses of the community and to the extent that it interferes with the drinker's health or his social or economic functioning."[15] This definition, stressing cultural deviance and damage to the drinker, avoids the "alcoholism as a disease" controversy. The WHO also distinguished between alcohol addicts and symptomatic drinkers. The latter group are similar to Jellinek's Beta alcoholics.[16] The WHO committee on alcohol-related disabilities subsequently published a report endorsing the use of the term *alcohol dependence syndrome.* The use of this term suggests that a number of clinical phenomena occur with sufficient frequency to constitute a recognizable pattern, but the different elements are not always expected to appear with the same magnitude or frequency. The essential features of alcohol dependence syndrome are (1) regularity in the repertoire of drinking behavior, (2) emphasis on drink-seeking behavior, (3) increased tolerance to alcohol, (4) repeated withdrawal symptoms, (5) repeated relief or avoidance of withdrawal symptoms by further drinking, (6) subjective awareness of a compulsion to drink, and (7) reinstatement of the syndrome after periods of abstinence.[17]

A committee of medical authorities commissioned by the National Council on Alcoholism and Drug Dependence (NCADD) developed a set of guidelines to facilitate the diagnosis and evaluation of alcohol dependence at multiple levels. The criteria that were developed consist of eighty-six symptoms grouped into three major diagnostic levels, with each level divided into separate tracks based on physiologic symptoms, behavior, and attitudes.[18] An experimental evaluation of the use of these criteria on 120 male alcoholics concluded that thirty-eight items did not differentiate between alcoholics and nonalcoholics and that only four items explained 90 percent of the variance between the two groups. These items were gross tremor, regressive defense mechanisms, morning drinking, and blackouts.[19]

As we mentioned earlier, a major issue in defining chemical dependency is whether or not it is a *disease.* As you might expect, those persons with medical training who work in this field tend to define both alcoholism and drug addiction as diseases; persons with other types of backgrounds are not so sure. This is not always the case, however. Vaillant points out quite clearly that members of the medical community are not united in their conceptualization of alcoholism. About 85 percent of general practitioners agree that alcoholism is a disease, while only 50 percent of medical school faculty consider alcoholism (or coronary thrombosis, hypertension, and epilepsy) to be a disease.[20] Pattison, Sobell, and Sobell feel that alcoholism is a collection of various symptoms and behaviors related to the inappropriate use of alcohol with harmful consequences.[21] In other words, describing a person as an alcoholic is no more useful than is describing someone as having a rash. They argue that there is no single factor that explicitly defines and delineates alcoholism and that there is not a clear dichotomy between alcoholics and nonalcoholics. Furthermore, the sequence of appearance of adverse symptoms associated with drinking is highly variable, and there is no conclusive evidence to support the existence of a specific biologic process that predisposes a person toward alcoholism. Their most controversial assertion, however, is that for many "alcoholics," alcohol problems are reversible. In other words, some alcoholics may safely return to social drinking. This clearly puts them at odds with the majority of alcoholism professionals as well as Alcoholics Anonymous, which regards alcoholism as an incurable illness that can be treated only through total abstinence.[22]

Criteria developed by the American Psychiatric Association in its *Diagnostic and Statistical Manual (DSM-III-R)* distinguishes between psychoactive substance *dependence* and psychoactive