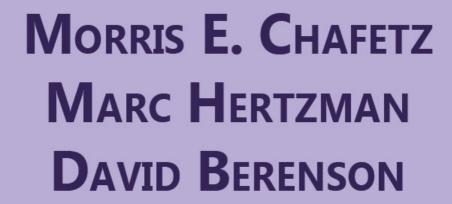
American Handbook of Psychiatry

ALCOHOLISM

A Positive View



ALCOHOLISM:

A POSITIVE VIEW

Morris E. Chafetz Marc Hertzman, and David Berenson

e-Book 2016 International Psychotherapy Institute

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ALCOHOLISM: A POSITIVE VIEW ¹

Morris E. Chafetz Marc Hertzman, and David Berenson

Alcoholism is a fascinating problem. It is a challenge. Its mysteries remain as r deep as the human organism itself and as intricate as our social structure. There is only now emerging agreement among experts as to what is necessary in order to speak of someone as an alcoholic person. Controversy and disagreement about the nature and the origins of alcoholism are so profound and complete that virtually every plausible explanation ranging from genetic to biochemical, from psychological to sociological, has been propounded at one time or another. To make matters even more complicated, it is possible to find research in the field that partially supports every single one of these points of view.

When it comes to treatment the situation is just as complex and confusing. Perhaps, if anything, it is even more challenging for the sufficiently hardy and daring to undertake the treatment of those labelled "alcoholic" in our society. For many years an aura of hopelessness surrounded anybody who in one way or another acquired this diagnosis and anyone who dealt with him. It is now quite clear to those who treat alcoholic people regularly that the outcomes of treatment are very much related to the treater's

expectations of them. If these expectations are high, people can be substantially restored to their former levels of function and more. A number of studies now exist which demonstrate this fact quite adequately.

Even more surprising at first glance, the theories of causation of alcoholism often have little relation to the presentation of symptoms, and the theoretical models of development of alcoholism have only modest bearing upon the types of therapy rendered for the condition or the results achieved. No other area of psychiatry, with the possible exception of schizophrenia, presents so many open-ended options to the clinician, the researcher, or the programmer. And, like schizophrenia, prognosis in alcoholism is far from invariant even when no treatment is rendered at all.

We prefer to stress positive functions that alcohol use *and* alcoholism serve. Of course, we are accustomed in psychiatry to attribute positive usages to what is generally taken to be disease or illness—but not to alcoholism. There is nothing new about the notion of functions that maintain integrity. Freudian psychiatry has always stressed understanding the functions that a symptom serves. But alcoholism has always been assumed to be different from other human problems. In many clinics, hospitals, and private offices today, the alcoholic person must divest himself of his prime symptom, his drinking, before he is permitted treatment. This is somewhat akin to requiring the tuberculosis patient to stop coughing before he can receive his

streptomycin.

In Ego Psychology especially during the last decade the constructive, purposeful mental processes in behavior have been newly rediscovered in relation to cognition, moral values and the like. We propose to carry these concepts simply one step further. It is helpful, especially to the clinician, but also to people interested in other aspects of alcoholism and psychiatry, to try to recast patient and family histories in terms of what promotive functions they serve. As we shall see, this is far more than an academic exercise and is difficult to do, but quite rewarding in its consequences. This is especially true of the treatment sphere, but there are even enticing suggestions that this may be true of some research efforts as well.

With so many avenues to pursue, it is necessary to conceptualize the field in a systematic way. A systems approach, the holistic concept of attempting to take into account the interrelationships among critical variables, can serve as such an organizer. Since the manifestations of alcoholism pertain to the human organism all the way from the cellular level to the network of social organization in which people live, the discussion which follows deals with a multilevel problem in exactly the same way.

Defining goals clearly is essential to both researcher and therapist. It is possible to delineate operational goals at each of the levels of system

organization we are discussing. The art comes in maintaining a sense of what level is being dealt with at any given moment, while at the same time not forgetting the larger ramifications. Clues to progress in alcoholism may come from any discipline. They will be utilized only insofar as they can be articulated to others whose education and training may be quite different.

Definitions and Criteria of Alcoholism

Current definitions of alcoholism are discussed in Volume Two of the *Handbook*, Chapter 48, by Chafetz and Demone. For purposes of this chapter we adapt the following definition of alcoholism: "Alcoholism is any drinking behavior that is associated with dysfunction in a person's life." This definition is meant to encompass all the major spheres of importance to a given person, including his or her sense of self, interpersonal relations, physical wellbeing, and work.

The disease model of alcoholism has been under heavy fire. In part, this is a reflection of the dissatisfaction generally in some quarters about the "mental illness" concept. The basic argument is that such labels have been used punitively and pejoratively to single out people who are societal deviants. In the case of alcoholism, events often seem to show a time lag in relation to the discovery of similar problems in health and mental health in other areas. Thus, the disease concept was propounded in its full-blown form

in a classic work by Jellinek in i960, but is the subject of controversy a decade later.

Jellinek's Forms of Alcoholism

E. M. Jellinek proposed four types of alcoholism. Type *Alpha* consists of purely psychological dependency without loss of control. *Beta* alcoholism is that species in which physiological complications are present, but no physiological or psychological dependence can be demonstrated. *Gamma* alcoholism is the most clear-cut variety, and involves psychological loss of control as well as physiological evidence of tolerance. *Delta* type alcoholism is the same as *Gamma*, with the additional factor of inability to abstain from drinking. The latter was included primarily to describe the pattern most common in France.

Jellinek's views unquestionably were enormously influential. The value of his contribution in regard to the disease concepts of alcoholism was at least twofold. In the first place, he implied that there was a progression in states of alcoholism. This seems reasonable enough, unless one adopts the view that alcoholism is simply the result of drinking too much alcohol. (This latter notion formed part of the basis of the rationale of the Temperance Movement for many years.)

What was more difficult for many to accept was the idea that the

progression to full-blown chronic drunkenness, or physical disease and death, was inevitable. At the time that Jellinek's book was written, this was a reasonable hypothesis. However, time has not borne out the postulate of inevitability. In fact, longitudinal studies over time in the field suggest that a large number of people drift in and out of states over a period of years that by all reasonable definitions would be considered alcohol addiction.

In the second place, a usable disease model was a definite advance in attitudes toward the problem *for the time* when it was formulated. The predominant American attitude toward drinking continues to be that the majority who drink alcohol—at least two-thirds of all Americans—do so in order to achieve an altered, and presumably more palatable, state of consciousness. However, Americans are profoundly ambivalent about drinking problems. They look upon the "alcoholic" as the skid-row bum, despite the fact that it is increasingly clear that down-and-outers constitute only 3 to 5 percent, or less, of the total alcoholic population. The origins of the mental hospital and the tuberculosis sanitarium are the same and both of them deal with the alcoholic person more than with any other single type of diagnostic group of people who are kept out of sight and out of mind.

The disease or illness concept thus permitted the public to reconceive of alcoholism as a problem to understand rather than to deny and penalize. "Free will," the idea that the alcoholic person could stop himself by his own

efforts if only he would, has served to prevent the provision of services to the alcoholic person except *in extremis* for many years. The rationale was that help from others would compromise his efforts at self-control. By contrast, the notion of loss of control is quite consistent with psychiatric concepts of the unconscious.

There have also proved to be other uses of the disease model of alcoholism. The gatekeepers, those to whom the alcoholic person is most likely to present himself first, have traditionally been ministers, social workers, the police, and physicians. The concept of illness has provided new avenues of referral that, theoretically at least, should be more likely to route the alcoholic and potentially alcoholic person toward the help he requires. The National Institute on Alcohol Abuse and Alcoholism (NIAAA), the Federal government's primary agency for dealing with alcoholism established by Public Law 91-616 in 1970, has engaged in a campaign to raise public consciousness of alcoholism problems through the media, press, and publishing. These efforts seem to be taking hold. Therefore, it seems likely that the traditional gatekeepers will ultimately be affected as well. In addition, there is a movement afoot to change state laws to remove the offense of drunkenness from the criminal codes books and make alcoholism a health problem instead.

The National Council on Alcoholism Criteria for the Diagnosis of Alcoholism

The National Council on Alcoholism (NCA), the nation's largest voluntary organization dealing with alcoholism, has organized a Criteria Committee which his produced the first recent major effort at consensus in diagnostic criteria for alcoholism. These criteria have now been published all over the world and are being tested for validity. The criteria are meant to be used in conjunction with the American Psychiatric Association (APA) standard psychiatric nomenclature so that the clinician makes a psychiatric diagnosis, a physical diagnosis, and then lists a category or type of alcoholism. In the Diagnostic and Statistical Manual (DSM II), in contrast to the first APA effort at standardizing diagnosis in psychiatry, in DSM I, alcoholism has been removed from the "Personality Disorders" category and given a separate listing, along with the addictions. This was done in part to emphasize that alcoholism cuts across all standard psychiatric categories, and can be present in neurosis, schizophrenia, personality disorders, and other conditions.

The format of the NCA criteria is a double set of "tracks". Track I consists of evidence of dependency on alcohol and clinical syndromes of presentation. (For example, alcoholic hepatitis and pancreatitis are included.) Track II is the "Behavioral, Psychological, and Attitudinal" set of symptoms and signs. In each track there are major and minor criteria, and evidence for diagnosis is required from *both* tracks in order to complete a diagnostic picture.

Advantages of the NCA Criteria

The NCA criteria bring together much of the present knowledge about alcoholism in a single format, which is meant for clinicians and researchers. It is a handy reference for categorizing symptoms and signs. In addition, it should serve to alert the astute clinician, whether psychiatric or not, to the possibility that his patient is suffering from alcoholism. The criteria are in line with a long tradition in medicine, the best example of which is the Jones Criteria of Rheumatic Fever, in which, when the criteria are used methodically, clinicians in different centers can have an increased degree of confidence that their patients are like those of other physicians who have reported in the literature. The NCA criteria place alcoholism in the same rank with other chronic diseases.

Disadvantages of the NCA Criteria

Although it is premature to judge the NCA criteria before they have been adequately tested, there appear to be some distinct limitations to them. First, although the criteria are intended, among other things, to differentiate early-from late-stage alcoholism, the emphasis in them is quite clearly upon the later stages, where this diagnosis is more clear-cut. Possible pre-alcoholic phases do not appear at all in the tables of Major and Minor criteria (although some predisposing factors have been outlined separately by the Committee). The most significant use of the NCA criteria, therefore, may prove to be to

confirm the diagnosis in those who are already likely to be known as alcoholic people. Yet, the major challenge to the alcoholism field today, from a public health standpoint, is in the *primary prevention* of alcoholism.

Incidence

(For a more complete discussion, see Chafetz and Demone, Chapter 48.) Whereas previously it was necessary to base estimates of alcoholism rates largely upon deaths by cirrhosis, multiplied by appropriate corrections factors, it is now possible to corroborate previous estimates and refine them from large-scale surveys of Americans at large. It has been found that there is a substantial group of people who apparently cure themselves of the symptoms of alcoholism. Several recent studies describe a group of formerly alcoholic people who are able to go back to social drinking, with or without therapy. This is contrary to the dicta of Alcoholics Anonymous, and suggests that there are subgroups of people with serious drinking problems for whom the return of functionality is quite different.

It has also been found that dysfunctional drinking behavior is normative in certain subpopulations. In the Armed Forces, the majority of men would qualify as alcoholic people by quantity-frequency indices of intake. This is also true of some American Indian tribes and Alaskan Native villages, and is highly correlated with severe social deprivation in a number of spheres.

Women as Casualties of Alcoholism

In the past ten years, both in the United States and England, there has been a growing indication that more and more women are developing alcohol problems. The Merseyside (Liverpool) Council on Alcoholism has noted that the ratio of women to men seeking treatment for alcoholism in Britain has increased from eight to one, to four to one. It is difficult to determine statistically the number of women suffering from alcoholism, as they are not as visible as male alcoholics. In the United States, Keller and Efron in 1955 showed a ratio of 5 and 6 men to one alcoholic woman, while in the 1960s, as quoted in Soloman and Black, Chafetz, Demone, reported a ratio of four to one.

Until recently most studies dealt with the alcoholic male and there was little interest in the alcoholic female. Data collected from the NIAAA funded programs indicates that women who come to treatment start drinking at a later age in life than men, but become alcoholic in a shorter span of time, substantiating the findings of Wanberg and Knapp. NIAAA data also indicate that twice as many working women seek help for their alcoholism as do housewives.

Drinking among women is associated with anxiety and depression resulting from crisis situations such as the death of a child, children leaving the home, divorce, desertion, marital problems, menopause, menstrual pains, abortion, and demanding children. Dr. Sharon Wilsnack has found the alcoholic woman experiences chronic doubts about her adequacy as a woman, which are enhanced by acute threats to her feminine adequacy. Her drinking is usually done from 9:00 a.m. to 3:00 p.m. when the children are in school, or until her husband comes home. She feels very guilty when she is drinking alcohol and, like the alcoholic male, tries to hide her problem from her family.

Biochemistry of Alcohol and Alcoholism

The biochemistry of alcohol and its biochemical effects upon the body have been a subject of recent reviews and will be dealt with here only in passing. Alcohol is absorbed through the gut quite readily, by passive transport, and this is the source of the immediacy of its effects upon the central nervous system. The passage of alcohol is dependent upon body weight, and is significantly slowed by the presence of food in the stomach, particularly proteins. Blood alcohol levels (BAL) have essentially vanished in a normal adult within four hours of ingesting a single dose. However, subsequent doses prolong this process additively. The practical consequences of these facts are that social drinking in moderation and low doses can be entirely compatible with normal function, even driving, after a sufficiently long period, and that the accoutrements of the setting in which alcohol is taken are important determinants of the outcome (e.g., "high" versus drunk).

Under ordinary circumstances, the metabolism of alcohol takes place largely in the liver, although kidneys and lungs may become important ultimate disposition routes when there is significant damage to the liver. The oxidation of alcohol is first to acetaldehyde, generally in the presence of the enzyme alcohol dehydrogenase, in the presence of nicotinamide adenine dinucleotide (NAD).

$$NAD^{+} + CH_{3}CH_{2}OH \rightleftharpoons$$

 $NADH + H^{+} + CH_{3}CHO$

Then, the aldehyde is oxidized to acetate, in the presence of an NAD requiring aldehyde dehydrogenase.

$$NAD^+ + aldehyde \rightarrow$$

 $carboxylic acid + NADH + H^+$

The acetate thus formed is then metabolized further, as for energy production in the heart. The drug disulfiram (Antabuse®) appears to act as a competitive inhibitor, blocking the breakdown of acetaldehyde and allowing either the aldehyde or another resultant toxic product to build up in the body.

Effects of Alcohol Upon the Nervous System

Alcohol belongs to the CNS depressant group of drugs, and there is cross-tolerance between it and minor tranquilizers, such as chlordiazepoxide (Librium®) and Meprobamate (Miltown®). Its absorption into the brain is dependent upon its ability to be absorbed by lipids through cell membranes like other depressants.

However, the observed *behavioral* effects of alcoholism on the organism can be quite variable (see below). In general, its effects on the brain are doserelated, and affect the cortex first, releasing inhibitions in many people, and affect lower centers only later, as the quantity of accumulated alcohol grows. The setting, or context, in which drinking is done has much to do with determining the presentation of the induced behavior, as does also the activity level before and during drinking and the *expectations* of the person doing the drinking. For example, it has been shown that the dose-response curve to a number of drugs is related to the previous activity level, and there is a maximum to this effect. It has even been suggested that commonly observed drunken behaviors in our society are *totally* determined by societal expectation, for which suggestion there is some limited cross-cultural evidence.

At present there are a number of promising possibilities for locating the major biochemical effects of alcohol on the CNS. These range from alcohol's effects upon ionic transport across the nerve cell membrane, to their possible

role in relation to neuroamine transmitters, to the plausible hypothesis that methanol may be formed in the body and act as a toxin during withdrawal. The congeners present in alcoholic beverages have also been implicated as toxins, although their role in trace amounts is in considerable dispute.

Etiology

General Considerations

As alcoholism is a multilevel problem, it is not completely correct to speak of a sole causation. Wender, in an excellent discussion, has pointed out the difference between necessary and sufficient explanations in psychiatry.

We will be using the concept of etiology in three different senses in our discussion: (1) Alcoholism may be a condition in which factors operate at more than one system level (for example, biological predisposition and social reinforcement may be necessary for development of the condition). (2) Alcoholism may not be one disease, but rather a mixture of many behaviors, syndromes, and diseases, each of which has its own etiology. (3) Regardless of what the underlying causation is, alcoholism may best be regarded as a final common pathway with underlying causes sometimes unimportant for prognosis and treatment. What is important is an understanding of the factors that are continuing to reinforce and perpetuate the drinking pattern.

Biological Factors

Alcohol is an addicting drug. If a person drinks large amounts of alcohol over a period of time or if alcohol is administered in large doses to laboratory animals, both tolerance and physical dependence will develop.' Tolerance is a need for increasing levels of a drug to achieve the same behavioral or biochemical results as previously occurred. Physical dependence is the presence of withdrawal symptoms after the drug has been removed. A traditional view in the field is that alcohol is intrinsically addicting, both because of its production of tolerance and physical dependence as well as its actively-sought euphoric effects.

Recent evidence makes the addictive hypothesis more involved. Researchers have been consistently unable to develop experimental animal models of alcoholism. Primates, for example, are remarkably resistant to voluntarily drinking even weak solutions of alcohol, although tolerance and withdrawal have been seen by some when the primates are forced to drink or alcohol is administered parenterally. Evidence from observing alcoholic people in controlled drinking situations has indicated that many alcoholic people, in fact, have dysphoric experiences (or a transient euphoria followed by a longer dysphoria) when drunk, not the euphoric ones that are so widely predicted. Other studies have shown that "behavioral tolerance" may be as important as "metabolic tolerance". The alcohol-dependent person consumes

up to one quart a day of alcohol without signs of gross inebriation and little impairment of psychomotor functioning, yet little difference can be demonstrated in the metabolism of alcoholics compared to normal subjects.

Clinical observations are consistent with the research findings. In the United States a relatively small percentage of alcoholic people drink heavily every day (Jellinek's *Delta* alcoholism). A more common pattern is binge drinking or marked day-to-day fluctuations in the amount of alcohol consumed. Thus, while the addicting properties of alcohol as a drug are important, a pattern similar to that of heroin addiction with frequent drug "craving" is not often observed.

Other evidence for biological factors in alcoholism has come from human genetic studies, particularly the work of Donald Goodwin and his colleagues. In a recent study done in Denmark with adopted children with high-risk potential for alcoholism, they found that children whose biological parents were alcoholic people had a significantly higher chance of developing alcoholism than a controlled group of adopted children whose biological parents were not alcoholic people. However, again the situation is more complicated than at first appears. When "heavy drinkers" were looked at in addition to "alcoholics," the controlled group, in fact, had a higher incidence of heavy drinkers than the experimental group. The second complication is that there is at present no way of determining whether the alcoholism was

inherited as a specific trait or whether a predisposition to psychopathology was inherited which became manifest as alcoholism in a culture where there is a high incidence and encouragement of drinking. Goodwin quotes from Hebb, who, in writing about intelligence, warned against regarding intelligence as due either to heredity *or* to environment; or partly to one, partly to the other. "Each is fully necessary ... To ask how much heredity contributes to intelligence is like asking how much the width of a field contributes to its area".

Psychological Theories of Etiology

From Freud on, most psychoanalytic writers have emphasized that alcoholic people have severe oral dependency problems. Various writers see these oral conflicts as having stemmed either from early childhood deprivation or overindulgence. As a result of the oral fixation, there are associated problems such as poorly-defended-against rage and hostility, sexual immaturity, depression, schizoid object relations, strong dependency wishes, deep mother fixations, and the use of denial as a defense. Alcohol then serves as an escape valve for pent-up feelings, allowing the individual to express both dependency and hostility. (For further discussion of these psychodynamic explanations, the reader is referred to the article by Zwerling and Rosenbaum in the first edition of this Handbook).

In addition to oral dependency, another main theme in the psychoanalytic literature emphasizes the issue of latent homosexuality. Because of frustrations in early mothering, boys turn towards the father, establishing homosexual impulses. Fenichel points out that under the influence of alcohol, the homosexual impulses may come to consciousness and may be acted out. This theory has had little empirical verification.

Other psychoanalytic writers have emphasized other aspects. Menninger sees the self-destructive tendency as being more important than oral dependency and suggests that alcoholism may be both a manifestation of the self-destructive trend as well as a way of averting a greater self-destruction. Rado sees all drug cravings as part of a larger disease which he terms "pharmacothymia" in which pharmacological pleasure replaces normal sexual pleasure. Blum, in reviewing various psychoanalytic theories, concludes that there is no pre-alcoholic personality type and supports multiple determination instead of unitary etiology of alcoholism.

McClelland's Work

Recent empirical and theoretical work by McClelland and his colleagues has led to a new hypothesis: that alcoholic men drink out of a heightened personalized power drive. As McClelland states, "men drink primarily to feel stronger. Those for whom personalized power is of particular concern drink

more heavily. . . . the experience centers everywhere in men on increased thoughts of power which, as drinking progresses, become more personal and less socialized and responsible. And societies and individuals with accentuated needs for personalized power are most likely to drink more heavily in order to get the feeling of strength they need so much more than others." Wilsnack, as mentioned above, has developed explanations as to why women drink.

Learning Theory Models

As with psychodynamic explanation, there are numerous learning theory models, variously including classical conditioning, operant conditioning, and social learning.' Miller and Barlow, for example, point out that the reduction of anxiety from drinking is reinforcing. The alcoholic individual is able to exhibit more varied, spontaneous social behavior and gain increased social reinforcement from relatives and friends. Aversive consequences such as hangover, physical problems, loss of family or employment, and arrests may not decrease drinking because of the long delay between the actual drinking behavior and the occurrence of these events. Mendelson and others, however, as previously mentioned, have demonstrated that alcoholic individuals experience many aversive consequences while drinking. He suggests that "black out" phenomena may lead the individual to remember only the transient pleasurable experiences at

the beginning of drinking, thus perpetuating the drinking pattern.' Davis, et al. point out that the observed dysphoria may also be accompanied by adaptive behaviors which are then reinforced, perpetuating both the behaviors and the drinking pattern.

Family Theories of Etiology

Until the late 1950s, alcoholic people were stereotyped as a group of "under-socialized, poorly integrated individuals comprising homeless derelicts, chronic offenders, and the mentally ill". For example, in 1945 Bacon argued that excessive drinking patterns are more incompatible with marriage than with any other social institution because these patterns effectively preclude the close interpersonal relationship necessary for marriage. As more facts about the alcoholic person and his family have emerged, it has become increasingly clear that family factors are important in causing and maintaining alcoholism and that successful therapy may depend upon recognition of these factors.

The first change in perspective consisted in looking at the wife of the alcoholic man. It was recognized that when the alcoholic husband began to improve, many wives began to exhibit psychiatric difficulties. Other clinical patterns were also evinced, such as a woman marrying a man who was just like her alcoholic father, or a woman who was divorced because of her

husband's alcoholism only to marry another alcoholic man. Explanations for these patterns resembled the psychoanalytic hypotheses that sought to explain alcoholism itself. Again, there were discussions of unsatisfied oral needs, dependency conflicts, and masochism.

The introduction of family therapy and theory and systems theory into psychiatry in the past ten years has led to new perspectives on the role of alcoholism within a family. Alcoholism is now seen not as a result of individual pathology within one of the family members, but as a result of an interaction among all family members or as part of a behavioral program that maintains a family homeostasis. Steinglass and his colleagues, as well as other workers, have discussed in a series of papers how an ongoing alcoholic pattern may serve to stabilize a family system. One important dimension of these theories bears emphasis. Family and systems conceptualizations of alcoholism by and large do not look for ultimate causes of behavior. Rather they would hold that drinking is constantly being reinforced because of its systems homeostatic benefits, and that the role of alcohol in maintaining the family system currently must be understood before any therapeutic intervention can be planned.

A clinical illustration may clarify the above points. It is not uncommon to hear family members say that they can best talk to the alcoholic member of their family when he is drunk. In a sense, the situation has evolved in such a family where emotional interaction takes place only when the alcoholic person is drunk. The result is a habitual behavior pattern which is further reinforced. This pattern is perhaps most vividly portrayed in Eugene O'Neill's play *Long Day's Journey Into Night*.

For a provocative and stimulating theory of the development of alcoholism using systems and cybernetic concepts, the reader is referred to the article by Gregory Bateson, who was also the originator of the double-bind hypothesis concerning the etiology of schizophrenia.

Social Forces and the Etiology of Alcoholism

Alcoholism has been viewed as the nonpareil of social diseases as far as sociologists are concerned. A number of major American figures in sociology and anthropology either got their start dealing with questions about alcoholism, or attempted to deal with them at some point in their careers. Many undoubtedly moved into other areas after having burned their fingers on a problem which seemed to defy solution. Once again, the intellectual history of the study of alcoholism is an illustration that: (1) teasing out single, or simple, sets of problems and solutions is extraordinarily difficult, if not impossible in alcoholism, and (2) a systems approach is likely, at this point in time, to prove the most productive methodology.

Possibly the most fruitful studies to date (see above) have been the

ongoing longitudinal surveys of attitudes and drinking practices. These have yielded a number of interesting results, as well as sharpening our techniques for measuring such elusive variables as "function" and amount of drug ingested over time. One of the earliest, that of Straus and Bacon, demonstrated that there were definite ethnic and religious patterns to drinking behavior, and these suggested some causal relationships to alcoholism. The McCords in the Cambridge-Somerville Project found highly suggestive evidence of consistent family patterns in the later development of alcoholism. For example, the absent or delinquent father, especially if alcoholic himself, was a strong precursor of alcoholism in his sons. This data is also consistent with that of Robins, who traced the subsequent careers of a series of white children treated in a psychiatric clinic. She demonstrated that over a thirty-year period, the psychopathology of fathers tended to be correlated with the development of later problems, including alcoholism, in the children.

Cahalan and co-workers have published a large series of papers, monographs, and books over the past decade in which a large scale door-to-door sampling on American drinking practices has been taken, and repeated. As a result, for the first time, a clear picture of numerous issues has been emerging. Sex differences have been sharply delineated for the first time, and it is clear that drinking problems for women have decreased sharply by age 50, whereas for men they are still rising.

Ethnic and religious differences previously described have been borne out, with some added nuances. For instance, Catholics drink more than Protestants and have more alcohol-related problems. To complicate matters, however, *liberal* Protestants are more likely to be heavy drinkers than conservative Protestants, thus suggesting that, on this dimension at least, the more "fundamentalist" Protestant groups, despite their severe, restrictive and ambivalent attitudes towards alcohol, differ little from Catholics. On the other hand, strength of affiliation, as measured by church-going, had a variable relationship to the sect under consideration. In fact, among Catholic men, there was a slightly *higher* tendency to drink heavily if the interviewee was a church attender.

Much can be learned by comparing how drinking customs and alcoholism rates vary among nations and national groups. It is well known that Italians, Jews, Chinese, and Greeks display substantially less public drunkenness and probably have significantly lower rates of alcoholism. In Italian families, wine serves a definitely promotive function to mark festive occasions. The rest of the time, however, it is taken for granted. Children begin to try it early in life. Italians generally do not imbibe alcohol between meals, however. Since it seems likely that recollections of early drinking in childhood are inversely correlated with alcoholism later, this cultural patterning may have lifelong implications for outcome. However, it is impossible to separate out the extent to which the family relationships

condition the response to tasting alcohol. Correlation does not necessarily imply cause.

By contrast, the French, like Americans, have incorporated a social notion of *machismo* around drinking. A man is measured by his capacity to hold liquor without staggering. The French drink at meals, but unlike the Italians consider the wine an essential part of the atmosphere. Moreover, especially in the working class, wine may serve as a between-meals refresher as well. Aside from showing one of the highest cirrhosis rates in the world, the French have developed a type of alcoholism all their own which corresponds to Jellinek's *Delta* type alcoholic person, one in whom tolerance develops but a steady significant dosage input is necessary to maintain him without evidence of tremors or delirium.

Drinking Versus Drunkenness

Our society often confuses drinking and drunkenness. We once embarked upon a "noble experiment" to eliminate drinking. Yet, during and after Prohibition we have continued to regard drunkenness as a joke and even sometimes as something to be admired. This attitude of condoning irresponsible behavior, of accepting the unacceptable because "I was drunk" or "the poison in the bottle made me do it," will prevent us from making significant progress in the treatment of alcoholism, no matter how much new

research is done or how much money is spent.

Styles of drinking behavior, including quantity and frequency of ingestion, are, of course, matters of private decision and likely to remain so. Nevertheless, it is clear that important factors besides conscious decision-making are operative in determining both the process and outcome of drinking alcohol. Those cultures in which alcoholic beverages are of relatively little importance are also the same ones which tend to condemn drunkenness. Chinese and Jews tend to look upon the drunken man not as an object of humor, but of pity or scorn. By contrast, "drunk" jokes are a staple of general American humor.

Alcohol as an Aspect of a Multiple Drug-Taking Culture

Anecdotal reports from numerous centers indicate that cross-addiction to two or more drugs, such as heroin and alcohol, is more common than was previously recognized. It is reasonable to speculate that this is a result of the acceptability of ingesting multiple drugs in our society, whether or not they are physician-prescribed. A series of waves of popularity in the use of particular drugs over the course of the twentieth century has obscured the fact that the availability of a given drug at a given time was the most salient reason for its use. Efforts are being made to coordinate alcohol and drug programs at Federal, State, and local levels in recognition of this fact.

However, the success of such joint ventures may depend upon the extent to which drug use is set into the perspective of the social forces at work in our culture.

Consequences of Alcoholism

Whether drinking alcohol is considered cause or result, there are numerous patterns that develop in the course of dysfunctional drinking behavior. These are described by system level in the sections that follow. None of them should be conceptualized as irreversible. Even in its severe stages, cirrhosis of the liver is known to improve markedly when drinking ceases for months to years. From a practical standpoint, some restoration of function is possible for anyone at any stage of alcoholism.

Biological Consequences

It is a truism rarely observed in practice, that every patient requires a physical examination, whether or not he be labelled a psychiatric or alcoholic case. On the other hand, it is customary in the hospital-based practice of medicine to undertake heroic efforts to correct metabolic imbalances in alcoholic people acutely ill, while passing off the underlying alcoholism problems with a brief psychiatric consultation or a referral to Alcoholics Anonymous. Similarly, it is usual to assess the patient's disability both

medical and psychiatric, whereas his residual *ability*, which is not necessarily measurable in the same ways as his disability, may be much more important in formulating treatment plans and prognosis.

The cardinal measures of "irreversible" tissue damage associated secondarily with alcoholism are brain damage and liver damage. A moderately abnormal EEG, the hallmark of delirium and dementia, which remains abnormal over time, may be quite consistent with recovery from alcoholism, and with the maintenance of relatively stable interpersonal relations, holding a job, and psychological comfort. Although cirrhosis of the liver is generally considered the end stage of persistently heavy drinking of the drug, the largest number of pathological diagnoses at autopsy, some of which are, of course, alcoholic, are made on previously unsuspected livers. In other words, a substantial number of cirrhotics go undiscovered during life, and are presumably normal people.

Nevertheless, although we deliberately emphasize the constructive uses of alcoholism, we do this as a matter of reapportioning emphasis, not of ignoring possible causal relationships with other diseases. It is known that the greatest single pathological correlate with pancreatitis is alcoholism. The involvement of alcohol ingestion in several forms of cancers is currently being investigated. The role of alcohol in relationship to heart disease has been investigated in various total community surveys and there are preliminary

suggestions that in low doses alcohol may actually be protective against myocardial infarction and angina, whereas in high doses it may substantially weaken the myocardium. Similarly, a host of neurological syndromes are well described. Of these, Wernicke-Korsakoff's psychosis, memory loss and confabulation with concomitant internuclear opthalmoplegia, is perhaps the best known, although a relatively unusual entity. More generally, a mild but significant impairment of cognitive function may be present on routine neurological examination when mental status is assessed.

The importance of the crosscurrents between the primary (behavioral) manifestations of alcoholism and the secondary consequences of toxic damage from alcohol is that it is more often than not impossible for any one person to be able to deal with the totality of the patient's medical problems. In much the same way that multiple agencies and persons may be involved in the psychological treatment of the alcoholic person, so, too, in the medical sphere self-reliance by the physician is no virtue.

Alcohol and Other Organ Systems

Alcohol is a food in the sense that it has caloric value. It can, therefore, substitute for other routinely available calories, which are ingested in more nutritious forms (e.g., protein). For this reason, it is quite possible to be "starving amidst plenitude," while ingesting a total daily intake of calories

equivalent to an adult minimum. Whether alcohol causes liver damage directly, or only in the presence of relative nutrition deficit, is still a matter of dispute. However, it seems clear that there is some type of interaction between the two, and the result is cirrhosis of the liver. In the end stages of liver damage, hepatic coma may confuse the picture of drunkenness and add to the effects of alcohol ingestion (although no specific product to date has been shown to correlate well with the stages of hepatic coma).

Other fairly frequent physical manifestations of alcohol-induced disease include cutaneous stigmata, cardiomyopathies, skeletal myopathies, peripheral neuritis, and blood dyscrasias (especially anemias).

Psychological Consequences

Many writers have commented on the psychological changes that occur in an alcoholic person once he is trapped in a vicious drinking cycle. Glatt mentions feelings of guilt, inability to discuss problems, grandiose and aggressive behavior, persistent remorse, failure of promises and resolutions, loss of other interest, avoidance of important responsibilities, loss of ordinary willpower, moral deterioration, impaired thinking, indefinable fears, inability to initiate action, and vague spiritual desires as the alcoholic person moves from occasional relief drinking to obsessive drinking in vicious cycles. John Berryman, in his novel *Recovery*, describes what it is like to go through some

of these experiences.

We wish to emphasize three aspects of psychological changes, an understanding of which can be helpful for initiating successful treatment. (1) Concern with alcohol. The individual who previously drank alcohol only under certain circumstances finds drinking increasing and, perhaps more important, he is often concerned with alcohol when not drinking. It becomes very important for him to know where his next drink is coming from, and he may start hiding bottles around his house or planning his daily events so that alcohol is always available. It should be emphasized that in some ways knowing where he can get alcohol is more important than the actual drinking. He can increase or decrease his drinking to a considerable degree as long as he knows that he will not be completely cut off from alcohol. (2) Denial. As anyone who has a friend or relative who is an alcoholic person knows, the alcoholic individual persistently thinks up rationalizations as to why he does not have a drinking problem. He may talk about the particular type of alcohol he consumes or might insist that he is a heavy drinker and not alcoholic. The denial becomes even more strong when directly challenged, since often an alcoholic person is now defining himself totally by his drinking and a challenge to that identity may represent the challenge to his basic identity. It is important when attempting to challenge the denial of an alcoholic individual that recognition also be given to the beneficial aspects that alcohol is playing in his life as well as recognizing what underlying personality

strengths there are that have not been affected by alcohol. (3) *Self-loathing*. Society usually focuses on the harm that the alcoholic individual does to others. A closer look reveals that these manifestations of outward aggression are often in reaction to intense feelings of self-disgust. The alcoholic individual is also caught in a vicious cycle where he acts out one drunk to release those intolerable feelings and winds up loathing himself even more when he sobers up, only to express the anger again during the next drunken episode. It is crucial not to further reinforce the cycle and accept the alcoholic person's low estimate of his self-worth which may be an important precursor of suicide. Working toward an alcoholic individual's better acceptance of himself, again emphasizing his strengths, as well as his weaknesses, can interrupt the vicious cycle.

Family Consequences

The vicious cycle or positive feedback loop that the individual alcoholic person is caught in is usually part of a similar process that exists in the family. The non-alcoholic spouse accuses the alcoholic person of ruining the family life; the alcoholic spouse explains the drinking by saying it is the only way to tolerate the family life that the spouse has created. Mutual recriminations can escalate to separation and divorce, violence, or a situation that everyone considers intolerable but which may persist for years. One very striking aspect of such a situation is the unpredictability of the fluctuation of

positions. Promises to stop drinking switch into adamant threats to increase drinking. Threats by the non-alcoholic spouse to leave the impossible situation alternate with decisions to stick out the situation and help the "sick" alcoholic spouse.

Sexual relationships, often not wholly gratifying before the increase in drinking, become a further source of strain. One such pattern in this area is the sexual approach of the alcoholic individual while drunk, the rejection of the approach by the spouse because of drunkenness ("it's disgusting"), and then increased drinking because of hurt pride.

Children in particular are unfortunately affected by such a situation. The rapid fluctuations in the alcoholic spouse, and often, in the non-alcoholic spouse, make consistent parental guidance almost impossible. At times, outright child abuse may occur, but the greater problem is how the child copes with a situation in which he is alternately ignored, smothered with love, and then perhaps blamed for the entire situation.

Some children may attempt to cope with the situation by developing behavioral problems themselves. Others may assume a family role by being over-responsible and in a sense becoming their parents' parent.

Children may also be harmed physically by a mother's heavy drinking. A recent study suggests that there is a greater chance for birth defects in

children born to mothers who are heavy drinkers.²

Some of the long-term sequelae of being raised in a family with alcohol problems are the development of alcoholism, marrying an alcoholic person, or developing other psychiatric disorders. Much future research needs to be done in this area to determine the exact risk to these children, as well as to develop techniques to establish a true primary prevention program.

Social Consequences

The reader is referred to M. E. Chafetz and H. W. Demone, Chapter 48, Volume 2 of the *American Handbook of Psychiatry*.

The Natural History of Alcoholism

In treating any condition it is important to know what its natural history would be if treatment were not offered. The understanding that there is more than one natural history in alcoholism is essential for any formulation of treatment plans. We wish to emphasize that alcoholism is a chronic problem. While we have argued above that the medical model has some usefulness in treating alcoholism, the *acute* medical model so often taught in medical school has very little relevance to most situations. The four categories of natural history patterns offered here are not inclusive and are intended mainly to encourage workers in the field to keep in mind the importance of changes

through time in alcoholism.

Downward Spiral

Alcoholism has traditionally been viewed as a progressive disease or condition. The potential alcoholic person starts as a social drinker, becomes increasingly psychologically and physiologically dependent upon alcohol, and eventually reaches the point where alcohol totally dominates his life. According to this viewpoint, there is a corresponding deterioration in the alcoholic's family, work, and social functioning. Eventually, as the downward spiral continues the alcoholic "hits bottom", a point at which he is defeated physically, emotionally, and socially and at which time therapy, particularly the Alcoholics Anonymous approach, can finally be effective to help the alcoholic individual understand the destructive consequences of his drinking. If he does not receive help at this point, the traditional theory would hold that he is likely to wind up a skid-row derelict.

In more recent years, there has been considerable revision of the traditional position. Alcoholics Anonymous now speaks of "high bottom" and "low bottom". A "high bottom" is direct recognition by the alcoholic individual of his powerlessness over his drinking and its consequences without having depleted his social and emotional resources. The alcoholic individual can seek help with his functioning still relatively intact. However, if help is not

forthcoming, the traditional view would hold that the downward spiral would continue. More recent observations, however, have indicated that there are a number of alternative courses for alcoholism to take and that the view that all alcoholic persons, if untreated, will show a progressive downhill course is both incorrect and potentially countertherapeutic.

Steady State

The steady state drinker is the one about whom arguments will often develop as to whether he is a social drinker or an alcoholic person. Alcohol plays an extremely important part in his life, but there is no evidence for a downward spiral for many years, if ever. Included in this group is the physiologically addicted individual, classically seen in France, or the Delta alcoholic of Jellinek, who drinks large amounts of alcohol every day, but shows no obvious malfunctioning in his family or work life. Often this person eventually seeks help when physical sequelae of drinking finally appear. Another drinking pattern that might fall in this group is the individual who may only drink one or two drinks a day, but that drinking has an inordinate importance to him. Clearly such an individual is not "sick" by most definitions and such a pattern may persist unchanged for a lifetime, but care must be paid to the possibility of this pattern's switching into one of the other patterns mentioned here.

Fluctuating State

The most common drinking pattern seen in American society is one that waxes and wanes. There may be a predictable periodicity, such as getting drunk every weekend or going on a binge every six weeks, or drinking episodes may be irregular, often reflecting episodes of psychological, family, or job stress. Frequently in these instances, the use of alcohol and drunken behavior, although clearly having a disruptive effect upon the alcoholic individual and his family, also has a definite adaptive effect, serving as an escape valve for certain tensions that have been building up and are felt to be inexpressible without the assistance of alcohol.

Spontaneous Recovery

Perhaps as many as one-third of people with drinking problems spontaneously recover. Not enough is known at this time as to whether they become social drinkers or become totally abstinent. Similarly it is not known how often they slip back into a pathological drinking pattern. Possible explanations for this pattern include "will-power", a realistic appraisal of the consequences of drinking, and changed family and social circumstances.

Therapy and Alcoholism

The plethora of theories of causation of alcoholism is matched only by

the multiplicity of treatment modalities, some of them quite offbeat and exotic, and perhaps applicable to therapy of other conditions besides alcoholism. The correspondence between theory and therapy is quite low. This should not be surprising from what has been said above. The multifarious threads of causation and participation in the condition of alcoholism are so interwoven that it is unlikely that very many close connections could be made between theory and practice.

In fact, there are essentially as many treatments possible as there are people to receive them. Because a person happens to come through the doors of a clinic or office specializing in a particular brand of treatment does not mean that the client must be molded to fit the Procrustean bed of the available method. What patients want is not necessarily the same as what therapists think they want, unless therapists listen very carefully; what therapists want for patients may not be available in that particular program. Often the client requires an advocate who can help him to navigate the treatment and social systems. Ideally, this should be somebody who is trained for this particular job, such as a counselor into whose job description this is written. However, in the real world, it is likely to be the primary job of the first person who sees him, especially in therapy.

We wish to reemphasize that, whatever the form of therapy, the therapist must keep in mind the positive role alcohol is playing in the patient's life. The negative aspects have been repeatedly emphasized by family, the law, and other "helpers". Recognition of positive behaviors that previously could only be expressed when drunk and the development of a plan to allow expression of them without resorting to alcohol are indispensable for effective treatment.

Some generalizations about therapy are warranted, and a classification scheme is useful for descriptive purposes. We proceed in the following sections from chemo-biological therapies, to individual, to family, and to social and other therapies.

Biological Treatment

Biological treatment includes treatment of the sequelae of alcoholism and treatment aimed at preventing and reducing further drinking. In treating the possible sequelae of alcoholism, particular care must be given to prevention and treatment of Wernicke's syndrome and delirium tremens, both of which are relatively rare but potentially quite serious. Any poorly nourished alcoholic person should receive large doses of thiamine and other B-vitamins to prevent Wernicke's syndrome, particularly if he is admitted to the hospital and receiving parenteral glucose. To prevent and treat delirium tremens, it must be recognized that its onset occurs about 72 to 96 hours after withdrawal of alcohol and ends fatally in about 15 percent of untreated

cases. The most important aspect of management of delirium tremens is to make sure the patient is well hydrated and to correct any electrolyte imbalances, including magnesium. Use of major or minor tranquilizers may be helpful in decreasing the patient's agitation, but there is, at present, no evidence that they decrease the mortality rate from delirium tremens.

Other withdrawal symptoms from alcohol occur in the first twenty-four to forty-eight hours after cessation of drinking and are not as potentially serious as delirium tremens. Here major and minor tranquilizers are both helpful in decreasing agitation and allowing the patient to sleep. Chlordiazepoxide (Librium®), given either orally or parenterally, is most commonly used although it has not been clearly demonstrated that it has therapeutic advantages over either the major tranquilizers or paraldehyde.

When treating the medical sequelae of alcoholism, it is particularly important to adopt a nonjudgmental, nonmoralistic attitude. Particular care must be given to avoid "scare tactics," since one of the common results of such an approach is to increase subsequent drinking because of the anxiety generated by being confronted with the lurid details of all the possible damage that alcohol can cause. However, neither should a patient's denial of problems be supported. More important than what is said is how it is said. Many medical personnel who work on detoxification units and general medical wards become discouraged with recurrent admissions of alcoholic

people for medical problems, but the situation can be changed by both an attitudinal and behavior change on the part of medical personnel, as well as the establishment of a therapy system where the alcoholic person can get meaningful support.

Attempts up to the present to prevent further drinking by biological treatment have had only a limited success. Most commonly used are disulfiram (Antabuse®) and chlordiazepoxide (Librium®). By taking one tablet of Antabuse each morning, the alcoholic person knows that he will be violently ill if he ingests even a small amount of alcohol in any form. Some therapists have found disulfiram very helpful in maintaining an initial sobriety that enables the alcoholic person to become involved in other therapeutic modalities. An occasional patient will prefer to take disulfiram regularly for the rest of his life, helping him to resist any urges to resume drinking. A large number of alcoholic people, however, do not find disulfiram beneficial. If they desire to drink, they merely skip their medicine for one or two days. If they are forced to take medication, by being either institutionalized or forced to report every day for observation to see they take the medication, they often become covertly angry at their treatment and will seize upon the first opportunity to sabotage it.

Chlordiazepoxide and other minor tranquilizers have been widely used in the outpatient treatment of alcoholism by physicians. The rationale is that

the medication will decrease the patient's anxiety, thereby lessening the amount of drinking. The results have been quite disappointing. Sometimes the patient may develop an addiction to the medication instead of alcohol or he may even take both the medication and alcohol. Recent studies have indicated that antidepressants and major tranquilizers may be more effective than minor tranquilizers in relieving symptoms of anxiety and depression. It should be emphasized that meaningful interpersonal interaction is more helpful than giving medication for nonspecific reasons. If a psychiatrist finds himself giving medication as a way of getting rid of an alcoholic patient, he would be far better advised to spend a little extra time with the alcoholic person and make an appropriate therapy referral.

Biological treatment toward preventing or diminishing further drinking may be successful when there is a concurrent or underlying psychiatric condition that is usually amenable to drug therapy. The manic-depressive patient who drinks, the individual who has an increase in drinking related to becoming severely depressed, or the schizophrenic who drinks as a sort of self-medication may each respond to lithium, significant doses of antidepressants, or phenothiazines. Kline, in addition, has recently found that lithium administered to a group of men who had been hospitalized for detoxification without symptoms of manic-depressive illness significantly reduced the number of future detoxifications although the men continued to drink." If this study is confirmed, lithium might prove a valuable tool in

helping to decrease morbidity associated with alcoholism.

An important area of research at present is an attempt to find the essential blocker of the effects of alcohol similar to cyclazocine or naloxone with opiate addiction as well as to discover a similar or different "sobering-up pill" which an individual could take, for example, when he wished to drive home after a party where he was drinking. Even if such a medication can be developed, it remains to be seen how acceptable it will be both to the general public and to alcoholic people.

Other forms of biological treatment that have been advanced in alcoholism are the use of LSD and megavitamins. Although there were some reports of initial success with LSD, Ludwig's more recent work casts considerable doubt upon the specific value of LSD in the treatment of alcoholism. Megavitamins definitely have a place in treating the sequelae of alcoholism, but there is at present no evidence that they have any other role in treatment.

Individual Therapy

A number of earlier papers have stressed the role of psychodynamics in alcoholism. Oral perversions, based upon deprivations at an early age, have been postulated and utilized in the understanding of the therapeutic process. We now feel that this mode of thinking has only limited usefulness for a

limited group of people. Individual therapy can be successful with alcoholic people, but the productivity appears to be lower, both in terms of time input and improvement in function, than with other types of therapies such as group and family therapy. Nevertheless, individual therapy may continue to be a mode of treatment in the field which many will use. Therefore, it is helpful to understand what factors contribute to a happy conclusion for the client.

What therapists whose patients improve seem to have in common is largely their affective characteristics. These include empathy and unconditional warm positive regard. It behooves the therapist of alcoholic people to be an energetic activist. This most emphatically does not mean that he must charge into rescuing the client from each crisis. However, it does mean that he must share of himself as a human being, of what he is feeling at the moment. Alcoholic people in therapy are constantly testing the limits of a therapeutic contract. This creates anger in the therapist. Although inappropriate anger with patients is not useful, sharing with the patient what effect he has on others by his behavior is an important component of helping him to create a new self-awareness.

We have remarked above that the search for an "alcoholic personality" has been largely fruitless. Nonetheless, passive dependency does occur among a significant percentage of alcoholic people who appear for therapy.

This is perhaps the most difficult personality trait for most therapists to handle. Again, all therapy is in a sense behavioral in that it requires feedback to the person seeking help about the effects of his behavior. An appropriate goal of therapy for such a person might be to decrease the number of instances of passive resistance whether or not he understands why this decrease is happening. Treatment of alcoholism is the paradigm of a therapy in which understanding is not necessarily the ideal end point.

Even when an alcoholic person is engaged with an individual therapist, this rarely turns out to be the only significant person in his treatment. We recommend the provision of a coordinator, who can be of counselor status, to make sure that all the various modalities of help, including social and rehabilitation efforts, are consistent with one another.

Alcoholics Anonymous

Alcoholics Anonymous has historically been the most important modality in treating alcoholism, and it remains very influential. The reader is referred to the chapter by Chafetz and Demone for further discussion of this important modality.

Family Therapy

In the last few years there has been increasing interest in using family

therapy to treat alcohol problems. Many alcohol treatment programs now routinely see the spouse of the identified alcoholic and often the children or other extended-family members. If the active drinker refuses to come to sessions, some therapists are now comfortable in holding regular sessions with other family members to examine and change their role in perpetuating the drinking patterns, with the result that these patterns change without the formal participation of the identified alcoholic person.

Techniques used in family therapy of other problems can, with little modification, be used in treating families with alcohol problems. Bowen, for example, has described how he works with alcoholic families in similar ways to other families.' Alternative methods such as pointing out and actively changing repetitive communicational and behavior patterns and the use of paradoxical instructions can likewise be used. Therapists and family members have the tactical option of focusing on the role drinking is playing in the relationship or on other family difficulties which the drinking is serving to cover up, or which contribute to the drinking.

An advantage of family therapy is that once destructive drinking has stopped within the family, family therapy can proceed to work on other issues, seeking to establish new relationship patterns that prevent a return of drinking or a future separation of the couple. An opportunity is also presented to work on preventing the transmission of alcoholic drinking

patterns to the next generation in the family. If such follow-up therapy is not done, there may occur such phenomena as a spouse becoming depressed, family members consciously or unconsciously manipulating the alcoholic member to resume drinking, separation or divorce, and delinquent behavior or alcoholism in the children.

The importance of treating the entire family has been recognized in the formation of Al-Anon and Al-Ateen as adjuncts to Alcoholics Anonymous. An interesting recent development in Washington, D.C. and perhaps elsewhere is the establishment of a social club for alcoholic people and their spouses, where both can go for social events, as well as for a modified form of couples' group therapy. It seems quite possible that this represents the beginning of a trend to see couples and families together rather than separately, as well as an early recognition that the issue in families is not how a "healthy spouse" deals with a "sick spouse", but how they deal together with a mutual interactional problem in which alcohol plays a very important role.'

At the present, there is little more than anecdotal studies that validate the promise of a family therapy approach. In part, this can be explained by the newness of this type of therapy. However, there may also be issues which are qualitatively different in evaluating family therapy compared to individual therapy. For example, is it a success if an alcoholic individual stops drinking, but he or his wife becomes more depressed or gets divorced? Conversely, is it

a success if drinking persists at the same level as before, but the family now is able to communicate better with less fighting?

Social Therapy

The concept of the network approach to problems has been elaborated in psychiatry by Ross V. Speck and his co-workers. They attempt to draw as large a community of people together as is necessary to deal with a mental health problem. Their focus is upon those immediately surrounding the family of an identified patient. This approach has been tried on a limited basis in dealing with alcoholic people. An effort is made to "surround" the drinking person in all major spheres of his life: family, work, personal relations—even the bar where he drinks. A concentrated effort is made to have all the significant people in his life deal with him in fundamentally the same, consistent way.

The notion of networks, however, is worthy of much wider application. First, it is not sufficient to identify a single person in the family as "the problem," nor for that matter, is it usually helpful to isolate a family in a neighborhood by drawing attention to them as the neighborhood black sheep. It can, on the other hand, be quite useful to help communities organize around the issues that are important to them. This implies a two-stage process: at the outset, raising consciousness of the existence of a problem;

later, it becomes important to advise on an approach to handling the problem. For example, it is known that alcoholic people have a high rate of suicide within six weeks of a serious loss in their lives. It is possible to institute a community-wide monitoring system of all such losses among the identified alcoholic population, and thereby prevent a significant percentage of suicides.

For a further discussion of social therapy and the establishment of treatment and prevention programs, the reader is referred to Chapter 48 by Chafetz and Demone.

Miscellaneous Therapies

The proliferation of psychiatric treatments has been reflected in alcoholism therapy. Aversion therapy, encounter groups, gestalt therapy, videotape confrontation, transactional analysis, biofeedback, transcendental meditation, psychodrama, have all been used in alcoholism treatment." Again, there is no convincing evidence of the utility or lack of utility of these approaches, and we wish to reemphasize the importance of the therapist's recognizing the adaptive and maladaptive consequences of alcohol in his client's life, and using particular techniques in an overall strategy, rather than trying to fit the patient into one particular form of therapy.

Two of the above therapies deserve special mention. Aversion therapy has received glowing reports by some as a way of eliminating drinking

behavior. Patients in whom alcoholism is more of a "bad habit" being currently maintained by forces in his environment and who are freely willing to go through what is an unpleasant experience may indeed benefit from aversion therapy. However, the therapist must be aware that the drinking behavior that is usually extinguished in aversion therapy is only part of the overall picture of alcoholism and that alcoholic people may often behave in a passive, superficially compliant way, while resisting underneath, a pattern that may in fact be reinforced by aversion therapy.

Transactional analysis, which is a particular type of group therapy, has become popular because it is easily understandable by both therapist and patient and because its emphasis on games, roles, and scripts is catchy and often therapeutically useful. Care must be taken to maintain a systems overview of problems encountered by the alcoholic individual rather than saying that everything is a game, also making sure that group therapy does not become an excuse for the venting of the therapist's and group members' aggression upon people who are often not accustomed to protecting themselves.

Evaluation of Treatment Outcome

As has been emphasized in the previous sections, there are relatively few clear-cut indications for specific treatments in alcoholism. Over the next few years we may become more precise as to what approaches are likely to be successful in specific instances, but we are unlikely ever to reach the point where we can develop standardized protocols for the treatment of alcoholism. For this reason, it is of the utmost necessity for each therapist to establish individualized goals in collaboration with his alcoholic client and his family and then to *evaluate*, again in connection with the alcoholic person and his family, how successfully the goals have been achieved. A useful methodology for establishing goals and evaluating progress is the problemoriented record as developed by Weed, with the possible addition of Goal Attainment Scaling. Such an approach is widely used at present in medicine, and the field of alcoholism, with its conglomeration of the medical, psychiatric, and social, would seem to be an ideal field in which to expand the use of the problem-oriented record.

Training and Alcoholism

While many people would probably agree that medicine is the primary discipline for alcohol studies, the need for others to be educated in alcoholism and the specific locus within medicine and the medical school where training should be centered are open to question. Dr. Barry Stimmel of the Mount Sinai School of Medicine in New York has indicated that only 15% of medical students chose elective courses in drugs and alcohol during their first year. Furthermore, despite the listing of more than ten electives for the final year,

only four students actually availed themselves of the opportunity to enroll in such courses. One may conjecture the extent to which this reflects the prevailing attitudes of medical faculties despite the major upswing in interest in the subject elsewhere.

The reluctance of medical schools to become involved in developing programs in alcoholism and addiction is reflected in the fact that the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Addiction had been able to make only eighteen awards in the "Career Teachers" program by the end of 1973. This has occurred in spite of the fact that every approved application has been funded. There has been discussion concerning the needs for subspecialties in alcoholism and the addictions. In our view, subspecialties in alcoholism and the addictions would probably lead to a slightly increased supply of specialists without addressing the fundamental question of whether alcoholic people would be better served by specialists or generalists.

We know that in developing our training plans we must think in terms of comprehensiveness. There is a need to focus medical education for alcoholism on primary prevention.

Toward an Ethos of Responsibility in Drinking

In Chapter 48 of the Handbook some concepts of prevention in

alcoholism are outlined. To these must be added another dimension: the idea of "responsible drinking." We have indicated that, in our view, whatever the causal relationships in the genesis of alcohol-related problems, alcoholism in its outcome remains primarily a social issue. In essence, and grossly oversimplified, the difficulty lies in our society's ambivalence toward the drunken person (see above for a discussion of Drinking versus Drunkenness). Each member of the society has obligations as part of the social contract, not only to others, but perhaps even more important, to himself. We are accustomed to thinking of self-respect, the dignity of one's self-image, and the sense of well-being as rights. However, they are also duties in several ways, for insofar as we value individual human life we owe it to ourselves to act responsibly. This is exactly what we feel needs to be elaborated and disseminated widely about drinking practices. People who choose to drink alcohol—and most do—need to have knowledge of its effects. In addition, they must have the opportunity to consider the probable consequences of their taking the drug alcohol.

In settings that are reasonable for a given person, with people who will further the individual's responsible use of alcohol, the use of alcohol can and should be healthy. For instance, a number of geriatric programs have come to realize that modest amounts of alcohol are viewed far more positively by participants than tranquilizers to achieve the same effects with approximately the same risk. There is every reason to expect that such

constructive usages can be expanded broadly into other areas.

It is also known that certain drinking practices tend to maximize the desired effects of alcohol and minimize the adverse effects: (1) Drinking small amounts, well-diluted and taken in combination with food; (2) finding congenial and relaxed settings; (3) avoiding drinking to relieve tension; (4) avoiding situations in which drinking is equated with manliness. Although some of these are clearly culture-specific, it involves no value judgment to point out that they can be incorporated to useful effect by other people.

The National Institute on Alcohol Abuse and Alcoholism has recently embarked upon a campaign to promote responsible drinking. The Federal government's only division-level prevention program has been organized, and it will operate with the goal of facilitating a change in the American image of what drinking practices can and should be. One of the first steps will be to draw attention to those subgroups of the culture which do assume a responsible attitude toward drinking alcohol and drug use, and to seek to understand what factors make this possible.

Bibliography

Ablon, J. "Family Structure and Alcoholism," in B. Kissin and H. Begleiter, eds., *Biology of Alcoholism: Social Biology* (Vol. 4). New York: Plenum Press, 1974, in press.

Ackerman, N. Treating the Troubled Family, New York: Basic Books, 1966.

- Bacon, S. D. "Excessive Drinking and the Institution of the Family," in *Quarterly Journal of Studies on Alcohol*, ed., alcohol, science, and society. New Haven: Yale Summer School of Alcohol Studies, 1945, 223-238.
- Bailey, M. B. "Alcoholism and Marriage: A Review of Research and Professional Literature," *Quarterly Journal of Studies on Alcohol*, 22 (1961), 81 ff.
- Bailey, M. B. "Al-Anon Family Groups as an Aid to Wives of Alcoholics," Social Work, 10 (1965), 68.
- Ballard, R. B. "The Interaction between Marital Conflict and Alcoholism as Seen Through MMPIs of Marriage Partners," *American Journal of Orthopsychiatry*, 29 (1959). 58 ff.
- Bandura, A. Principles of Behavior Modification. New York: Holt, Rinehart & Winston, 1969.
- Bateson, G. "The Cybernetics of Self: A Theory of Alcoholism," Psychiatry, 34 (1971), 1-18.
- Bertrand, S., J. Masling. "Oral Imagery and Alcoholism," *Journal of Abnormal Psychology*, 74 (1969), 50-53.
- Billet, S. L. "Antabuse Therapy," in R. Catanzaro, ed., *Alcoholism: The Total Treatment Approach*. Springfield, Illinois: Charles C. Thomas, 1968.
- Blane, H. T. The Personality of the Alcoholic. New York: Harper and Row, 1968.
- Block, M. A. Alcoholism: Its Facets and Phases. New York: John Day Co., 1966.
- Blum, E. M. "Psychoanalytic Views of Alcoholism: A Review," Quarterly Journal of Studies on Alcohol, 27 (1966), 250-290.
- Blum, E. M., R. H. Blum. *Alcoholism: Modern Psychological Approaches to Treatment.* San Francisco: Jossey-Bass, 1967.
- Bolman, W. N. "Abstinence Versus Permissiveness in the Psychotherapy of Alcoholism: A Pilot Study and Review of Some Relevant Literature," *Archives General Psychiatry*, 12 (1965), 456-563.

- Bourne, P. G., R. Fox. *Alcoholism: Progress in Research and Treatment.* New York: Academic Press, 1973.
- Bowen, M. "Alcoholism as Viewed Through Family Systems Theory and Family Psychotherapy," presentation before Annual Meeting, National Council of Alcoholism, Washington, D.C., April 3, 1973.
- ----. "Family Therapy and Family Group Therapy" in, Kaplan, H. and Sadock, B., eds., Comprehensive Group Psychotherapy. Baltimore: Williams & Wilkins, 1971.
- Butterworth, A. T. "Depression Associated with Alcohol Withdrawal: Imipramine Therapy Compared with Placebo," *Quarterly Journal of Studies on Alcohol,* 32 (1971), 343-348.
- Butterworth, A. T., R. D. Watts. "Treatment of Hospitalized Alcoholics with Doxepin and Diazepam: A Controlled Study," *Quarterly Journal of Studies on Alcohol*, 32 (1971), 78-81.
- Cahalan, D. Problem Drinkers. San Francisco: Jossey-Bass, 1970.
- Cahalan, D. and I. H. Cisin. Report of a Pilot Study of the Attitudes and Behavior of Naval Personnel

 Concerning Alcohol and Problem Drinking. BSSR:452. Washington, D.C.: Bureau of
 Social Science Research, Inc., 1973.
- Cahalan, D., I. H. Cisin, H. M. Crossley. *American Drinking Practices*. New Brunswick, New Jersey: Journal of Studies on Alcohol, 1969.
- Cahalan, D., I. H. Cisin, G. L. Gardner and G. C. Smith. *Drinking Practices and Problems in the U.S.*Army 1972. Report 73-6. Arlington, Virginia: Information Concepts, Inc., 1972.
- Catanzaro, R. J. *Alcoholism: The Total Treatment Approach.* Springfield, Illinois: Charles C. Thomas, 1968.
- Chafetz, M. E. Liquor the Servant of Man. Boston: Little, Brown & Co., 1965.
- ----. "The Alcoholic Symptom and Its Therapeutic Relevance," Quarterly Journal of Studies on

- Alcohol, 31 (1970), 444-445.
- ----. "Alcoholism Criteria: An Important Step," *American Journal of Psychiatry*, 129 (1972), 214-215.
- Chafetz, M. E., H. T. Blane, H. S. Abram, J. Golner, E. Lacy, W. F. McCourt, E. Clark and W. Meyers. "Establishing Treatment Relations with Alcoholics," *Journal of Nervous and Mental Disease*, 134 (1962), 395-409.
- Chafetz, M. E., H. T. Blane, M. J. Hill, eds. Frontiers of Alcoholism. New York: Science House, 1970.
- Chafetz, M. E., H. T. Blane and M. J. Hill. "Children of Alcoholics," *Quarterly Journal of Studies on Alcohol*, 32 (1971), 687.
- Chafetz, M. E., H. W. Demone, Jr. Alcoholism and Society. New York: Oxford University Press, 1962.
- Chafetz, M. E., H. W. Demone. "Alcoholism: Its Cause and Prevention," *New York State Journal of Medicine*, 62 (1962), 1614-1625.
- Chafetz, M. E. and M. J. Hill. "The Alcoholic in Society," in Grunebaum, H., ed., *The Practice of Community Mental Health*. Boston: Little, Brown and Company, 1970.
- Cohen, P. C. and M. S. Krause. Casework with Wives of Alcoholics. New York: Family Service Association. 1971.
- The Committee on Nomenclature and Statistics of the American Psychiatric Association.

 Diagnostic and Statistical Manual of Mental Disorders. First Edition. Washington,

 D.C.: American Psychiatric Association, 1952.
- The Committee on Nomenclature and Statistics of the American Psychiatric Association.

 *Diagnostic and Statistical Manual of Mental Disorders (DSM-II). Second Edition.

 Washington, D.C.: American Psychiatric Association, 1968.
- Criteria Committee, National Council on Alcoholism. "Criteria for the Diagnosis of Alcoholism," American Journal of Psychiatry, 129 (1972), 127-135.

- Davidson, C. S. "Nutrition, Geography, and Liver Diseases," *American Journal of Clinical Nutrition*, 23 (1970), 427-436.
- Davis, D. I., D. Berenson, P. Steinglass and S. Davis. "The Adaptive Consequences of Drinking," Psychiatry (in press).
- Deneau, G., T. Yanagita and M. H. Seevers. "Self-Administration of Psychoactive Substances by the Monkey," *Psychopharmacologia*, 19 (1969), 30-48.
- Ellis, F. W. and J. R. Pick. "Ethanol Intoxication and Dependence in Rhesus Monkeys," in, Mello, N. K. and Mendelson, J. H., eds., Recent Advances in Studies of Alcoholism, Publication No. (HSM) 71-9045. Washington, D.C.: U.S. Government Printing Office, 1971.
- Engel, G. L. and J. Romano. "Delirium, a Syndrome of Cerebral Insufficiency," *Journal of Chronic Disease*, 9 (1959), 260-277.
- Esser, P. H. "Evaluation of Family Therapy with Alcoholics," *British Journal of the Addictions,* 66 (1971), 251-255.
- ----. "Conjoint Family Therapy with Alcoholics—a New Approach," *British Journal of the Addictions*, 64 (1970), 275-286.
- Ewing, J. "Measuring Alcohol Consumption: The Alcohol Quotient," presented before the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, 1972.
- Ewing, J. A. and R. E. Fox. "Family Therapy of Alcoholism" in, Masserman, J. H., ed., *Current Psychiatric Therapies*. Volume 8. New York: Grune and Stratton, 1968, 86-91.
- Falk, J. L. "Behavioral Maintenance of High Blood Ethanol and Physical Dependence in the Rat," Science, 177 (1972), 811-813.
- Fallding, H. *Drinking, Community and Civilization*. New Brunswick, New Jersey: Journal of Studies on Alcohol, in press.
- Fenichel, O. The Psychoanalytic Theory of Neurosis. New York: W. W. Norton & Company, 1945.

- Fox, R. Alcoholism: Behavioral Research, Therapeutic Approaches. New York: Springer, 1967.
- ----. "Children in the Alcoholic Family" in, W. C. Bier, ed., *Problems in Addiction: Alcohol and Drug Addiction.* New York: Fordham University Press, 1962, 71-96.
- Gerard, D. L. and G. Saenger. *Outpatient Treatment of Alcoholism: A Study of Outcome and Its Determinants.* Toronto: University of Toronto Press, 1966.
- Glatt, M. M. "Group Therapy in Alcoholism," British Journal of Addiction, 54 (1958), 133-147.
- Gliedman, L. H. "Concurrent and Combined Group Treatment of Chronic Alcoholics and Their Wives," *International Journal of Group Psychotherapy*, 7 (1957), 414-424.
- Goldstein, S. G. *The Identification, Description and Multivariate Classification of Alcoholics by Means of the Minnesota Multiphasic Personality Inventory.* Unpublished dissertation, Purdue University, 1968.
- Goodwin, D. W. and S. B. Guze. "Genetic Factors in Alcoholism" in, Kissin, B. and Begleiter, H., eds., *Biology of Alcoholism*, Volume 3, *Clinical Pathology*, 1974, in press.
- Goodwin, D. W., F. Schulsinger, L. Hermansen, S. B. Guze and G. Winokur. "Alcohol Problems in Adoptees Raised Apart From Alcoholic Biological Parents," *Archives of General Psychiatry*, 28 (1973), 238-243.
- Gusfield, J. R. "Status Conflicts and the Changing Ideologies of the American Temperance Movement" in, Pittman, D. J. and Snyder, C. R., eds., *Society, Culture, and Drinking Patterns*. New York: John Wiley and Sons, 1962.
- Haley, J. and L. Hoffman. Techniques of Family Therapy. New York: Basic Books, 1968.
- Hallen, J. and J. Norden. "Liver Cirrhosis Unsuspected during Life," *Journal of Chronic Disease,* 17 (1964), 951-958.
- Harford, T. Personal Communication.
- Harris L., and Associates, Inc. Studies of NIAAA Advertising Campaign, prepared on contract,

1972-1973.

- Hartmann, H. Essays on Ego Psychology. New York: International Universities Press, 1964.
- Harvey, A. M., R. J. Johns, A. H. Owens, and R. S. Ross. The Principles and Practice of Medicine. New York: Appleton-Century-Crofts. 1972.
- Hebb, D. O. A Textbook of Psychology. Philadelphia: W. B. Saunders, 1968.
- Hertzman, M. and E. A. Bendit. "Alcoholism and Destructive Behavior" in, A. R. Roberts, ed., *Self-Destructive Behavior*. Charles C. Thomas, forthcoming.
- Hollister, L. E., et al. "Acetophenazine and Diazepam in Anxious Depressions," Archives of General Psychiatry, 24 (1971), 273-278.
- Israel, Y. and J. Mardones. Biological Basis of Alcoholism. New York: John Wiley & Sons, 1971.
- Jackson, J. K. "Alcoholism and the Family" in, Pittman, D. J. and Snyder, C. R., eds., Society, Culture and Drinking Patterns. New York: John Wiley & Sons, 1962, 472-492.
- Jacobson, A. M., M. W. Williams, R. J. Mignone and S. Zisook. "The Walk-In Patient as a 'Customer': A Key Dimension in Evaluation and Treatment," *American Journal of Orthopsychiatry*, 42 (1972), 872-883.
- Jeffries, G. H. "Diseases of the Liver" in, Beeson, P. B. and McDermott, U., eds., Cecil-Loeb Textbook of Medicine, Volume II Philadelphia: W. B. Saunders, 1967.
- Jellinek, E. M. Disease Concept of Alcoholism. New Haven: Hillhouse Press, 1960.
- Jessor, R., T. R. Graves, R. C. Hanson and S. L. Jessor. *Society, Personality, and Deviant Behavior*. New York: Holt, Rinehart & Winston, 1968.
- Kadushin, C. Why People Go to Psychiatrists. Chicago: Aldine, 1968.
- Kelleher, R. T., W. Fry, J. Deegan and L. Cook. "Effects of Meprobamate on Operant Behavior in Rats," Journal of Pharmacology and Experimental Therapeutics, 133 (1961), 271-

- Keller, M. "Alcoholism: Nature and Extent of the Problem," *Annals of the American Academy of Political and Social Sciences*, 315 (1958), 1-11.
- Keller, M. and V. Efron. "The Prevalence of Alcoholism," Quarterly Journal of Studies on Alcohol, 16 (1955), 619-644.
- Kenyon, W. H. About the Illness Alcoholism. Liverpool, England: Merseyside Council on Alcoholism.
- Kiresuk, T. and R. E. Sherman. "Goal-Attainment Scaling: A General Method for Evaluating Comprehensive Community Mental Health Programs," *Community Mental Health Journal*, 4 (1968), 443-453.
- Kissin, B. and H. Begleiter, eds., *The Biology of Alcoholism*, Volumes I-IV. New York: Plenum Press, 1971-1974.
- Klatsky, A. and G. Friedman. Presentation before American Heart Association, Atlantic City, New Jersey, 1973.
- Kline, N. S. "Evaluation of Lithium Therapy In Chronic Alcoholism," Paper Presented before Third Annual Alcoholism Conference, NIAAA, June 21, 1973.
- Knight, R. P. "The Psychodynamics of Chronic Alcoholism," *Journal of Nervous and Mental Disease*, 86 (1937), 538-548.
- Leifer, R. In the Name of Mental Health. New York: Science House, 1969.
- Levin, G. "How Well is the Community Mental Health Centers Program Achieving its Goals?"

 Paper presented before the American Psychological Association. Montreal, Canada: 1973.
- Lisansky, E. S. "The Etiology of Alcoholism: The Role of Psychological Predisposition," *Quarterly Journal of Studies on Alcohol*, 21 (1960), 314-343.
- Ludwig, A. M. "The Design of Clinical Studies in Treatment Efficacy" in, M. E. Chafetz, ed.,

- *Proceedings of the First Annual Alcoholism Conference NIAAA*, DHEW No. (HSM) 73-9074. Washington, D.C.: U.S. Government Printing Office, 1973.
- Ludwig, A. M., J. Levine and L. H. Stark. LSD and Alcoholism. Springfield, Illinois: Charles C. Thomas, 1970.
- MacAndrew, C. and R. Edgerton. Drunken Comportment. Chicago: Aldine, 1969,.
- Majchrowicz, E. and P. Steinglass. "Blood Methanol, Blood Ethanol, and Alcohol Withdrawal Syndrome in Humans," Federation Proceedings, 32 (1973), Abstract 2908, p. 728.
- Maxwell, M. A. "Alcoholics Anonymous: An Interpretation" in, D. J. Pittman and C. R. Snyder, eds., Society, Culture and Drinking Patterns. New York: John Wiley & Sons, 1962. g2. McClelland, D. C., W. N. Davis, R. Kalin and E. Wanner. The Drinking Man: Alcohol and Human Motivation. New York: Free Press, 1972.
- McCord, W., J. McCord, and J. Gudeman. *Origins of Alcoholism.* Stanford: Stanford University Press, 1960.
- Mello, N. K. "Behavioral Studies of Alcoholism" in, B. Kissin and H. Begleiter, eds., The Biology of Alcoholism: Physiology and Behavior, Volume II. New York: Plenum Publishing Co., 1972.
- ----. "A Review of Methods to Induce Alcohol Addiction in Animals," *Pharmacology Biochemistry & Behavior*, 1 (1973), 89-101.
- —. "Short-Term Memory Function in Alcohol Addicts During Intoxication" in, M. M. Gross, ed., Alcohol Intoxication and Withdrawal: Experimental Studies, Proc. 30th Int. Congress on Alcoholism & Drug Dependency. New York: Plenum Press, 1973.
- Mello, N. K. and J. H. Mendelson, eds., Recent Advances in Studies of Alcoholism: An Interdisciplinary Symposium. National Institute on Alcohol Abuse and Alcoholism, Washington, D.C.: U.S. Government Printing Office, 1971.
- Mendelson, J. H. "Ethanol-1-C Metabolism in Alcoholics and Non-Alcoholics," *Science*, 159 (1968), 319-320.

- ----. "Biological Concomitants of Alcoholism," New England Journal of Medicine, 283 (1970), 24-32, 71-81.
- Mendelson, J. H., J. LaDau and P. Solomon. "Experimentally Induced Intoxication and Withdrawal in Alcoholics, Part 3, Psychiatric Findings," *Quarterly Journal of Studies on Alcoholism*, Suppl. No. 2 (1973), 40-52.
- Mendelson, J. H. and N. K. Mello. "Studies of the Development of Alcohol Addiction In Infant Monkeys," *Annals of the New York Academy of Sciences*, 215 (1973), 145-161.
- Menninger, K. Man Against Himself. New York: Harcourt, Brace & Co., 1938.
- Miller, P. M., D. H. Barlow. "Behavioral Approaches to the Treatment of Alcoholism," *The Journal of Nervous and Mental Disease* 157 (1973), 10-20.
- Mitnick, L. Personal Communication.
- Mulford, H. A., D. E. Miller. "Drinking in Iowa, IV. Preoccupation with Alcohol and Definitions of Alcohol, Heavy Drinking and Trouble Due to Drinking," *Quarterly Journal of Studies* on Alcohol 21 (1960), 279-291.
- Murphy, G. E., E. Robins. "Social Factors in Suicide," *Journal of the American Medical Association* 199 (1967), 81-86.
- Nathan, P. E., J. S. O'Brien and D. Norton. "Comparative Studies of Interpersonal and Affective Behavior of Alcoholics and Non-alcoholics During Prolonged Experimental Drinking," in, N. K. Mello and J. H. Mendelson, eds., *Recent Advances in Studies of Alcoholism*. Washington, D.C.; U.S. Govt. Print. Office., 1971.
- Overall, J. E., D. Brown, J. D. Williams and L. T. Neill. "Drug Treatment of Anxiety & Depression in Detoxified Alcoholic Patients," *Archives of General Psychiatry* 29 (1973), 218-221.
- Paredes, A., et al., "A Clinical Study of Alcoholics Using Audio-visual Self-image Feedback," *Journal of Nervous and Mental Disease* 148 (1969), 449-456.
- Pattison, E. M. "A Critique of Alcoholism Treatment Concepts; With Special Reference to

- Abstinence," Quarterly Journal of Studies on Alcohol 27 (1966), 49-71.
- Pattison, E. M., E. B. Headley, G. C. Gleser and L. A. Gottschalk. "Abstinence and Normal Drinking, An Assessment in Changes in Drinking Patterns in Alcoholics After Treatment," *Quarterly Journal of Studies on Alcohol* 29(3) (1968), 610-633.
- Pittman, D. J., C. R. Snyder, eds., Society, Culture, and Drinking Patterns. New York: John Wiley & Sons. 1962.
- Pittman, D. J., C. W. Gordon. Revolving Door: A Study of the Chronic Police Case Inebriate. Glencoe, Illinois: The Free Press. 1958.
- Plaut, T. F. A., Alcohol Problems: A Report to the National Cooperative Commission on the Study of Alcoholism. New York: Oxford University Press, 1967.
- Popham, R. E., ed., Alcohol and Alcoholism. Toronto: University of Toronto Press, 1970.
- Rado, S. "Psychoanalysis of Pharmacothymia," Psychoanalytic Quarterly, 2 (1941), 227.
- Robins, L. N., W. M. Rates, P. O'Neal. Deviant Children Grown Up: A Sociological and Psychiatric Study of Sociopathic Personality. Baltimore: Williams & Wilkins, 1966.
- Roebuck, J. B. *The Etiology of Alcoholism: Constitutional, Psychological and Sociological Approaches.* Springfield. Illinois: Charles C Thomas. 1972.
- Satir, V. Conjoint Family Therapy: A Guide. Palo Alto: Science & Behavior, 1964.
- Scheidlinger, S. "Identification, the Sense of Belonging and of Identity in Small Groups," International Journal of Group Psychotherapy, 14 (1964), 291-306.
- Schneider, H. "The Intramembrane Location of Alcohol Anesthetics," *Biochimica Biophysica Acta*, 163 (1968), 451-458.
- Schuckit, M. A., D. A. Goodwin and G. Winokur. "A Study of Alcoholism in Half Siblings," *American Journal of Psychiatry*, 128(9) (1972), 1132-1136.

- Sobell, M. B., L. C. Sobell. Reported in *The Journal of the Addiction Research Foundation*, 2 (1973), 5.
- Speck, R. V., U. Rueveni. "Network Therapy," in N. W. Ackerman, ed., *Family Process*. New York: Basic Books, 1970.
- Steiner, C. M. Games Alcoholics Play. New York: Grove Press, 1971.
- Steinglass, P., S. Weiner and J. H. Mendelson. "Interactional Issues as Determinants of Alcoholism," *American Journal of Psychiatry*, 128(3) (1971a), 55.
- Steinglass, P., S. Weiner and J. H. Mendelson. "A Systems Approach to Alcoholism, A Model and Its Clinical Application," *Archives of General Psychiatry*, 24(5) (1971b), 401.
- Stimmel, B. "Integrated Curriculum in Drug Abuse, A Doctor's Perspective," presented before the First Conference on Medical School Curriculum Development in Drug Dependence, State University of New York, Downstate Medical Center, December 3, 1973.
- Straus, R. "Alcohol and Society," Psychiatric Annals, 3 (1973), 8-107.
- Straus, R., S. D. Bacon. Drinking in College. New Haven: Yale University Press, 1953.
- Szasz, T. The Myth of Mental Illness. New York: Harper & Row, 1961.
- Tamerin, J. S. and J. H. Mendelson. "The Psychodynamics of Chronic Inebriation: Observations of Alcoholics during the Process of Drinking in an Experimental Group Setting," *American Journal of Psychiatry*, 125 (1969), 886-899.
- Tamerin, J. A., S. Weiner and J. H. Mendelson. "Alcoholics' Expectancies and Recall of Experiences During Intoxication," *American Journal of Psychiatry*, 126 (1970), 1697-1704.
- Traux, C. B., R. R. Carkhuff. *Toward Effective Counseling and Psychotherapy: Training and Practice.* Chicago: Aldine, 1967.
- Ullman, A. D. "First Drinking Experience as Related to Age and Sex," in D. J. Pittman, C. R. Snyder, eds., Society, Culture, and Drinking Patterns. New York: John Wiley & Sons, 1962.

- Victor, J. and S. M. Wolfe. "Causation and Treatment of the Alcohol Withdrawal Syndrome," in P. G. Bourne and R. Fox, eds., *Alcoholism: Progress in Research and Treatment* New York: Academic Press, Inc., 1973, 137-169.
- Vogel, S. and R. R. Banks. "The Effect of Delayed Punishment on An Immediately Rewarded Response in Alcoholics and Non-Alcoholics," *Behavior Research & Therapy*, 3 (1965), 69-73.
- Wanberg, K. W. and J. Knapp. "Differences in Drinking Symptoms and Behavior of Men and Women Alcoholics," *British Journal of Addiction*, 64 (1970), 347-355.
- Ward, R. F. and G. A. Faillace. "The Alcoholic and His Helpers," *Quarterly Journal of Studies on Alcohol*, 31(3) (1970), 684.
- Weed, L. L. "Medical Records That Guide & Teach," New England Journal of Medicine, 278 (1968), 593-599 652-657.
- Weiner, H. B. "An Overview of the Use of Psychodrama and Group Psychotherapy in the Treatment of Alcoholism in the U.S. and Abroad," Group Psychotherapy, 19 (1966), 159-165.
- Wender, P. "On Necessary and Sufficient Conditions in Psychiatric Explanation." *Archives of General Psychiatry*, 16 (1967), 41-47.
- Whalen, T. "Wives of Alcoholics: Four Types Observed in a Family Service Agency," *Quarterly Journal of Studies on Alcohol*, 14 (1953), 632.
- Wilkinson, R. The Prevention of Drinking Problems. New York: Oxford University Press, 1970.
- Wilsnack, S. C. "The Needs of the Female Drinker: Dependency, Power, or What?" Harvard University, June 1972.
- Zwerling, I. "Psychiatric Findings In An Interdisciplinary Study of Forty-Six Alcoholic Patients," Quarterly Journal of Studies on Alcohol, 20 (1959), 543-554.
- Zwerling, I. and M. Rosenbaum. "Alcoholic Addiction and Personality," in S. Arieti, ed., American

Handbook of Psychiatry, 1st Edition. New York: Basic Books, 1959.

Notes

- 1 The authors gratefully acknowledge the assistance of National Institute on Alcohol Abuse and Alcoholism staff members Ms. Ruth Sanchez and Dr. Leonard Mitnick in the preparation of this Chapter, as well as Mrs. Lillian Light, Mrs. Anne Austin and Mrs. Katherine Schechter.
- 2 Jones, K. L, Smith, D. W, Ulleland, C. N., Streissguth, A. P. "Pattern of Malformation in Offspring of Chronic Alcoholic Mothers," *Lancet*, 1 (1973) 1267-1271. In a small sample, alcoholism was correlated with fetal malformation.