

# Review and Evaluation of Current Drug Therapies in Alcoholism

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This article reviews the current status of psychotropic drugs in the treatment of alcoholism and discusses the difficulties in assessing any treatment in light of the poor understanding of the condition. Phenothiazine tranquilizers, antidepressants, anorexiant, sedatives, antidipsotropics, and hallucinogens, are discussed through a review of the literature and in reporting present clinical and experimental studies. The phenothiazine tranquilizers, effective in most schizophrenia symptoms, have not been conclusively proved effective in anxious or neurotic patients or for common alcoholic symptoms—except in those few patients suffering from concomitant psychosis. Antidepressants are discussed, as are their possible value in treating some alcoholics during the withdrawal phase. Newer, longer-acting sedatives, such as the benzodiazepines, are evaluated and pharmacological reasons for their popularity are considered. Hallucinogens, enthusiastically endorsed by some as effective treatments for alcoholism but controversial for want of well-controlled studies are also discussed.

Drugs are frequently used in the treatment of alcoholism. Hayman and Ditman<sup>1</sup> surveyed the psychiatrists of southern California on their use of drugs and found that alcoholism was the second most frequent condition in which psychoanalysts use drugs, and the third most frequent in which general psychiatrists use them. Drugs were used more frequently for schizophrenia and depression. Of the psychoanalysts responding, 57% said they used drugs in the treatment of alcoholism by classical psychoanalysis, and 85% said they used them in psychoanalytic psychotherapy. The numbers for the general psychia-

trists were higher: 81% used drugs with intensive and 87% with supportive psychotherapy of alcoholism. Family physicians use drugs even more frequently.

Why are drugs used so often? First, let us consider what alcoholism is. Various assessments have been made of the causes underlying chronic excessive drinking but there is no certainty of the correct answer and certainly in our present state of knowledge there is no reason to conclude that there is a single entity that should be labeled "alcoholism." Here, where we are considering drugs in the treatment of the alcoholic, alcoholism would best be viewed as chronic excessive drinking symptomatic of an underlying disorder in the individual, be it psychological, emotional, or physiological. Most psychiatrists and therapists

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see emotional problems in the alcoholic, view these as chronic, even lifelong, and see the drinking behavior as not only stemming from these problems but as adding to them. The relationship between the drinking and the underlying problems is admittedly poorly understood. However, many alcoholics report that they feel anxious, tense, lonely, irritable, frustrated, hopeless, inferior, depressed, etc., and that they drink when they become more upset as alcohol relieves them temporarily, although they generally feel better when they are "not drinking." Thus, it makes sense to view alcoholic bouts as possibly precipitated by emotional upsets in emotionally disturbed individuals, and to attempt to treat these underlying disturbances. The assumption that drugs could contribute significantly to the treatment of the alcoholic is based on the above view of underlying problems and the fact that psychotropic drugs affect moods, thought processes, perception, and behavior. They are reported effective in treatment of such symptoms as anxiety and depression, as well as many symptoms common to the psychoses.

The question is, how warranted is the belief that drugs are effective in treating alcoholics? It is well known that, when treating psychiatric conditions, it is difficult to differentiate between effects of drugs and those of the doctor-patient relationship. Also, the behavior of the alcoholic is frequently unreliable. His accounts of his own conduct are often grossly distorted and frequently he fails to follow through with treatment. Most physicians, including psychiatrists, as Hayman<sup>2</sup> has shown, view alcoholics as poor treatment risks. One aspect of this unreliability, however—a notorious tendency of alcoholics to drop out of treatment, regardless of type—can be used for treatment evaluation. More will be said on this later.

Most drugs given to alcoholics by physicians are given in the office setting.

A doctor-patient relationship is established and the patient presents his complaints for treatment. Almost always these include complaints about how he feels. In our studies we have attempted to determine the value of giving various mood-changing drugs, and their effects upon the alcoholic's behavior and complaints, by the use of weekly evaluational interviews and forms, one filled out by the patient and one filled out jointly by a research assistant and the psychiatrist. A description of this procedure, and forms in facsimile, have been published previously.<sup>3,4</sup> These forms or rating scales were attempts to quantify certain aspects of the patient's behavior and feelings and to determine any changes following drug or placebo treatment. We studied a number of drugs in this fashion and what follows is an over-view of our findings, plus those of others, using the double-blind procedure and other controls in similar treatment settings.

### The Phenothiazines

The phenothiazine tranquilizers have been established as the most important drugs in the treatment of the psychoses. Cole *et al.*<sup>5</sup> reviewed the controlled studies of these drugs in the treatment of psychosis. Many of the studies they reviewed reported significant drug effects on most of the rated symptoms of schizophrenia, except for those of anxiety-tension-agitation and depression, which were relatively unresponsive. The effect of these drugs on drinking in the schizophrenic was not determined. Although such findings do not necessarily support the idea that these drugs would be helpful to the alcoholic, one would consider what value they might have as a treatment in maintaining sobriety and decreasing mood systems. Other less-well-controlled studies have reported that the phenothiazines have decreased anxiety in neurotics and alcoholics and might thus help the alcoholic. However,

Heilizer<sup>4</sup> reviews five studies that had some measure of acceptable design where neurotics were treated with chlorpromazine. He states: "No significant differences were found between chlorpromazine and placebo on a variety of evaluative procedures . . . there is no evidence of a chlorpromazine effect with neurotic patients."

Since little acceptable evidence is available on the use of phenothiazines in chronic alcoholism, one might hold the opinion from the evidence on the use of these drugs in neurotics, as summarized by Heilizer, that they would be of no help. We have looked at a number of phenothiazines in chronic alcoholics and our views of their value can be summarized by the results of the following two studies.

In one double-blind study, Cohen *et al.*<sup>7</sup> treated 158 outpatient skid-row alcoholics with trifluoperazine, (2-8 mg. per day) or a placebo. As compared to the placebo-treated group, the drug-treated group reported an increase in physical energy, a decrease in mental alertness, and no improvement in drinking pattern. On all other symptoms rated, no drug or placebo differences were found.

In a double-blind, placebo-controlled study with thioridazine, Ditman<sup>3</sup> found the drug no more effective than the placebo in influencing the return rate of alcoholic outpatients. Although thioridazine did not show any significant advantage over the placebo, patients with more severe complaints who received the placebo were less likely to return than were those who received the drug. In addition, patients who rated themselves as hostile, irritable, unsociable, and lonely were less likely to return if given the placebo.

From this and other studies using tranquilizers of the phenothiazine group, it is our impression that this type of drug has some value in the treatment of symptoms due to acute alcohol withdrawal,

but is of little or no value in the treatment of the usual alcoholic who does not have withdrawal symptoms or, in addition to his alcoholism, symptoms of a psychosis.

### The Antidepressants

What is the value of the antidepressant drugs in treating the chronic alcoholic? As with the use of these drugs in treating depression, there are a number of noncontrolled studies claiming they have value for the chronic alcoholic. However, these claims are not supported by well-controlled, double-blind studies. In fact, Kimbell *et al.*,<sup>8</sup> reviewing their studies of the use of antidepressant drugs in depressed patients, have raised questions regarding the drugs' efficacy and specificity.

Shaffer and co-workers<sup>9</sup> at the Spring Grove State Hospital undertook a double-blind study of nialamide or placebo in the treatment of 85 alcoholics. After 30 days, the over-all improvement was the same in both groups. Thus no clear beneficial effect from nialamide could be demonstrated.

In Alberta, Canada, Ramsay and co-workers<sup>10</sup> treated in a controlled study 211 outpatient alcoholics with the combination of 1 mg. of trifluoperazine and 10 mg. of tranlylcypromine, a placebo, or no drug. The number of returns in a month for group or individual therapy was the criterion of benefit. There was no significant difference in the attendance of the groups, and the idea that an antidepressant drug would help to decrease the drop-out rate or would help a patient to increase attendance at therapy sessions was not substantiated.

In a double-blind study, Ditman<sup>3</sup> treated 116 alcoholic outpatients with imipramine and 79 with a placebo. The two groups were apparently adequately matched since comparison of items on a form filled out at the initial interviews revealed no significant differences be-

tween them. No significant differences were found between the drop-out rates of the drug and placebo groups. Only 60% of the entire sample returned for the second week of treatment. However, when the drug and placebo groups were split into two further groups—those who showed signs of alcohol withdrawal and those who had not been drinking at the time of the initial visit—there was a difference in return rates between those given imipramine and those given placebos. Those who had been drinking were more likely to return if given the drug, while those who had not been drinking were more likely to return if given the placebo. Using the two-sample Kolmogorov-Smirnov test, the significance of this difference was .001. Non-drinking patients who expressed a craving for alcohol were even less likely to return if given the drug.

These data indicate that imipramine may have some adverse effect on the alcoholic unless he has withdrawal symptoms. This adverse effect may be the atropine-like side effects of the drug, which were frequent in this group. At the end of 1 week of treatment, 43% of drug-treated patients, but only 15% of placebo-treated patients, reported side effects. Analysis of the items on the questionnaires did not reveal any other basis for this difference in response.

The above study was based on the hypothesis that the depressed mood that alcoholics frequently report might respond to an antidepressant drug. The results of this brief study, however, do not support this hypothesis. The reason for the favorable effect of imipramine on the return rate of alcoholics showing withdrawal symptoms has not been determined. However, depression has been reported as a prominent symptom in alcohol withdrawal.

A group of nonalcoholic depressed patients was also treated with imipramine and compared with the alcoholics who received the drug. These two groups

were difficult to distinguish when just the patient-rated questionnaires were compared, although there was a tendency for the nonalcoholic patients to feel more unsociable and complain of a more unsatisfactory sex life. The non-alcoholics were described by the physicians as having more morbid expressions, deeper depressions, less energy, and greater impairment of thinking. While none of the alcoholics showed any evidence of psychomotor slowing, many of the other depressed patients did. The nonalcoholics generally responded to imipramine treatment after 3 to 4 weeks. The differences between these patients on questionnaire items and in results of imipramine treatment suggest that there were quantitative and qualitative differences between the depressions of the alcoholic and nonalcoholic patients. The depression of the alcoholics seems mild and chronic, that of the others more severe and acute.

Although we are impressed that many alcoholics are depressed, we question that the antidepressants are of any value for treatment unless the alcoholic is in withdrawal or suffering an acute depression with psychomotor slowing and morbid feelings and expression in addition to his alcoholism.

#### The Anorexigenics

Diethylpropion was studied<sup>8</sup> to determine whether an anorexigenic agent might have some damping effect on the alcoholic's drinking, craving for alcohol, smoking, or eating. There were no significant differences in the drug- and placebo-treated groups in the first three areas mentioned, but patients taking the drug were less likely to gain weight than those taking the placebo. This difference was particularly true of those who were told that the drug might cause loss of appetite. Patients given the drug were less likely to return than those given the placebo. The results indicate little prom-

ise in treating alcoholics with anorexi-  
genic agents.

### The Sedatives

Much has been written on the use and dangers of the various sedatives in treating the alcoholic. Many reports in the literature from noncontrolled studies indicate that sedatives have value in decreasing anxiety and the likelihood of the alcoholic's drinking. The opinion is common also that they may be misused by the alcoholic and that he may become addicted to them. The view that it is unlikely that a sedative would help the alcoholic is based on the following: these drugs may impair but not enhance intellectual functioning, there is no evidence to support the belief that the drugs treat the underlying problem of alcoholism, and the use of the sedative-drug alcohol has set a poor precedent. Certainly, there are no well-controlled studies to support their use other than in temporary symptomatic treatment.

In the past few years a new chemical group of sedatives, the benzodiazepines, has reportedly been very useful in treating the alcoholic. The claims for these drugs are based on the reports that they decrease anxiety and aggression without impairing intellectual or motor functioning and, even in high dosages, do not impair respiration.

### Chlordiazepoxide

Mooney *et al.*<sup>11</sup> did a controlled double-blind study of chlordiazepoxide with 214 outpatient alcoholics, half of whom received a placebo. This drug was chosen for study because it was reported effective against anxiety, fear, tension, and symptoms of alcohol withdrawal. It was the most effective drug of any studied in getting patients to return for treatment. It was equally effective with both skid-row and white-collar subjects, regardless of whether they showed

signs of alcohol withdrawal at the initial interview. Analysis of the various items on the patients' questionnaires gave no indication of why this was so. The physicians' ratings, however, showed more improvement in drug-treated than in placebo-treated patients. It is not known how the physicians were able to discriminate between the drug and the placebo treatments. They may have been guided by frequent statements by patients about having a feeling of well-being from the drug. These statements, however, did not find their way into the self-ratings on the patients' questionnaires. On the other hand, the physicians may have been influenced in their ratings by the fact that there were more side effects from the drug than from the placebo.

When drug-treated patients whom the physicians rated as improved were compared with drug-treated patients rated as not improved, it was found that the improved patients had rated themselves as more unsociable, shaky, worried, shy, and fearful at the start of treatment. It was also noted that skid-row alcoholics who were given the drug rated themselves more improved after the first week of treatment than did those who received the placebo. This initial advantage over the placebo was lost in subsequent weeks, however.

This study seems to indicate that chlordiazepoxide may have some usefulness initially in brief symptomatic treatment of the alcoholic and in getting him to return for further treatment. Also, the clinical impression drawn from a number of interviews with patients taking chlordiazepoxide was that the drug gave some alcoholic outpatients a sense of well-being and freedom from tension, but this was of short duration, a few weeks in most instances. The following brief case summary gives an example of one such patient.

I., L., a 50-year-old white married salesman, drank throughout the day and evening

because, he said, "It quieted an inner restlessness and made me feel I was more outgoing and functioning better." A number of medications were tried and chlordiazepoxide was his preference. In various studies he had shown little indication of being a "placebo reactor." He was switched back and forth five times from chlordiazepoxide to placebo, and always reported feeling better, less restless, and more outgoing when taking the drug. After taking 100 mg. of chlordiazepoxide daily for nearly 4 months, medication was stopped. He reacted to this by starting to drink again on the same day. No withdrawal effects from the medication had had time to develop. A week after the drug was discontinued, he no longer had the sense of well-being and freedom from restlessness that he had had while taking the drug.

Shaffer *et al.*<sup>12</sup> treated 199 hospitalized postacute, chronic alcoholics over a 30-day period with chlordiazepoxide (10 mg. or 20 mg., t.i.d.) or matching placebo in a double-blind study. They found that the patients on the drug had fewer somatic complaints and felt more friendly, but there was no evidence that the drug reduced anxiety or decreased the incidence of drinking. Actually, trends were that the drug increased anxiety and the incidence of drinking. This trend toward increased drinking was also noted in our studies at U.C.L.A. Shaffer and his group also reported that chlordiazepoxide (20 mg., t.i.d.) slightly impaired intellectual functioning and reduced serum albumin levels, which contrasts with findings from many previous studies reporting no blood-chemistry alterations or intellectual dulling. Included in this report is a good review of the literature of chlordiazepoxide in the treatment of alcoholism.

#### Chlordiazepoxide Analogues

Recently some analogues of chlordiazepoxide, LA-I (Mogadon), and diazepam have been developed, which in animals appear to be more potent tran-

quilizers. LA-I has the curious effect in animals of producing locomotor stimulation concomitant with muscle-relaxant, anticonvulsant, and aggression-inhibiting effects. It is reported that diazepam is more potent than chlordiazepoxide as a muscle relaxant, and as an anticonvulsant in tests with strychnine, pentamethylentetrazol, or electroshock convulsions in mice and cats.

In a double-blind study a total of 379 outpatient alcoholics were treated by Ditman *et al.*<sup>13</sup> The treatment was assigned randomly. After 3 weeks on the first treatment, each patient was then placed on a placebo—known to the physician only. One week later he was again randomly assigned one of the three remaining treatments. In this fashion he was carried through the three drugs and the matching placebo, with 1 week of physician-known placebo treatment interposed between each of these four. Each patient was seen at weekly intervals and the dosage was raised or lowered according to clinical response. The range of dosage for LA-I and diazepam was from 5 to 50 mg. daily, and for chlordiazepoxide, 10–100 mg. daily, with 15 or 30 mg., respectively, being the usual total daily dose.

Of the 379 patients started on this study, 85 completed two or more of the medications and only 16 patients remained in treatment 16 weeks to complete all three drugs and a placebo. This dropping out of treatment, for which the alcoholic is notorious, is used again for treatment evaluation, as we have found it related to the action of the drug. There was a trend, after the first week of treatment, for LA-I, diazepam, and chlordiazepoxide, in that order, to be more effective in getting the patients to return. This delayed effect might be due to the known accumulative action of these drugs and suggests that the initial dosages were too low. Previously we had reported that a higher dosage of chlordiazepoxide (25 mg.,

b.i.d.) was significantly more effective than the placebo in getting alcoholic outpatients to return. Consequently, late in this study, with some patients we doubled the starting dose. The return rate after the first week was better for those placed on the higher initial dosages of drugs than for the placebo. This delayed effect of the drugs on return rate indicates that a high initial dosage would be desirable, followed by a lower, maintenance one.

We analyzed the records of 46 of the patients in this study who completed two or more of the drug or placebo treatments. All the drug treatments were rated better than the placebo. Chlordiazepoxide just missed being significantly better than the placebo. Diazepam and particularly LA-I were both significantly better than the placebo. LA-I and particularly diazepam were better than chlordiazepoxide but not significantly so. LA-I and diazepam were about equal.

For the 16 patients who completed the series of all three drugs and placebo, a rank ordering for each of their four over-all responses indicated that LA-I was the best treatment, followed by diazepam, then chlordiazepoxide, with the placebo last. LA-I ranked first 56% of the time; the other two drugs were first 19% of the time each, and the placebo was ranked first only 6% of the time. Diazepam was ranked second 44% of the time.

When we enumerated our 46 patients' favorable responses and side effects, we found that LA-I had a slight edge with more favorable responses and fewer side effects. Actually, the incidence of side effects for the other two drugs was only slightly greater than that for the placebo, and none of these was severe. For all three drugs they consisted principally of drowsiness and lethargy.

With this patient population, and the dosages used here, LA-I in particular, and diazepam next, were found preferable to chlordiazepoxide or a placebo.

Oxazepam (Serax, Wyeth) is a recent-

ly marketed drug in the benzodiazepine series. Reportedly it is more water-soluble than chlordiazepoxide or diazepam and eliminated more quickly from the body. It has antianxiety and anticonvulsant activity and its manufacturer claims it to be safer and to have fewer side effects than the other two benzodiazepines. As yet there have been no studies evaluating it in alcoholics, but one might expect it to be about equal to chlordiazepoxide as a short-term treatment for the alcoholic.

#### Meprobamate Analogues

Tybamate (Solacen), chemically related to meprobamate, reportedly has some sedative or antianxiety action and some stimulating effect in depressed patients. Consequently, it is used in a variety of psychoneurotic disorders. It is claimed that tybamate exerts its influence by acting on the cerebral subcortex, thus presumably decreasing emotional instability.

Tybamate interested Mooney and Ditman<sup>14</sup> for study in alcoholics because of its curious effect of reversing LSD-induced electroencephalographic changes in rabbits and its combined antianxiety and antidepressant effects.

Starting with 102 outpatient alcoholics, we did a double-blind controlled study with tybamate (350-700 mg., q.i.d.), meprobamate (400-800 mg., q.i.d.), and a matching placebo (q.i.d.). After 1 week of treatment, we did not find tybamate superior to meprobamate or the placebo for relief of any of the symptoms of our alcoholic population. Analysis of the data beyond the 1-week time period was not worthwhile because of the high drop-out rate from treatment.

#### Disulfiram

Disulfiram was introduced in 1948 and, although highly regarded by a number of

experts in the field of alcoholism, the drug has never been widely employed by physicians for the treatment of alcoholism. Part of this may have been due to the early warnings about the dangers of the disulfiram-alcohol reaction and the practice of testing the patient with alcohol after a period on the drug to show him what the reaction is like. Smith<sup>15</sup> and others now do not recommend testing the patient. It is believed adequate to tell him what will happen if he does drink. The drug has been used in thousands of patients and there are many reports in the literature of its value. Claims of recovery run from 35 to 80%. However, again, carefully controlled studies are few and do not always support this enthusiasm.

Wallerstein,<sup>16</sup> in a comparative study of treatments for hospitalized alcoholics, reported 53% recovery after 1 year with disulfiram. However, this study was done shortly after disulfiram was introduced and there was high enthusiasm in the patients for "this new treatment from Sweden." A repeat of this study now might not show disulfiram so effective.

A study from Russia by Yanuskevskii<sup>17</sup> reported only 25% remission in patients after 6 to 12 months of treatment and only 1.5% after 2 years.

The value of disulfiram is that it appears to be a good test of the motivation of the patient for sobriety, although it does little or nothing to maintain that motivation. As the motivation of the alcoholic for sobriety wanes, so does the value of disulfiram. Its value then will be determined by other factors in the doctor-patient relationship that affect the patient's desire for sobriety.

### The Hallucinogens

Mescaline and particularly *D*-lysergic acid diethylamide or LSD have been enthusiastically endorsed by some as effective treatments for alcoholism. Both

drugs have been employed as adjuncts to various types of psychotherapeutic efforts and, in higher doses, to produce massive changes of consciousness. In psychotherapy, depending on the orientation and methods of the therapist, the drugs have been said to be effective in that they uncover unconscious material, strengthen the ego, allow an abreaction, heighten awareness, alter values, increase suggestibility, etc. The value of the massive experience has been explained as giving a transcendental or mystical experience that for some is beautiful, euphoric, and awe-inspiring, leading to a new awareness of self and the world. Psychological insights and new values are obtained. Often patients become more spiritual, esthetic, and hopeful in their interests and views. Dramatic improvements have been reported for the neuroses, the character disorders, and alcoholism. These claims have come for the most part from uncontrolled studies and individual case reports. The change in an individual following a massive LSD or mescaline experience has many similarities to a religious conversion, and, like a religious conversion, may have to be believed in and enthusiastically endorsed to be obtained. Ditman *et al.*,<sup>18</sup> in a questionnaire follow-up study of 74 subjects who had had the LSD experience, found that 80% said the experience was beautiful, happy, beneficial, and worth trying again. Those religiously oriented claimed the most benefit from it. Of the alcoholics, 67% claimed improvement and 36% claimed complete abstinence for 3 months or more following the experience. Other studies using a similar questionnaire but studying patients where the LSD was administered in a more enthusiastic environment obtained an even higher percentage of abstainers.

O'Reilly<sup>19</sup> studied 68 alcoholics and found that 38% were abstaining 2 to 34 months after their LSD experience. Of those who had a transcendental-like ex-



perience from the drug, 46% became abstainers. Ramsay *et al.*<sup>20</sup> treated 47 hospitalized alcoholics with LSD and found a resulting increase in their religious values.

However, controlled studies are yet to be done to substantiate the claims of those enthusiastic about the hallucinogens as treatment. Smart<sup>21</sup> reviewed the LSD literature and pointed out that none of the studies is well enough controlled to allow one to conclude that LSD is the effective agent.

If LSD is an effective agent for the alcoholic, it may be so only when given enthusiastically and in a special setting—one in which esthetic and spiritual values are suggested. Unfortunately, few controlled studies are being carried out as the drug is being restricted to physicians who are specialists and in research settings. Meanwhile, there is a black market of LSD flourishing in the large metropolitan centers, particularly around universities. Many individuals are treating themselves, unattended by medical supervision.

All this is not only hazardous for many people, but it has the effect of making research with these potentially valuable drugs less desirable and even suspect. It is ironic that a possibly effective treatment for the alcoholic can be put in disrepute by virtue of its very allure and misuse.

### Conclusion

There are a number of difficulties in evaluating a treatment for alcoholism. The condition itself is not well understood and there are no reliable short-term criteria by which to gauge improvement. Although alcoholics apparently have more mood and symptom complaints than normals, the relationship of these complaints to alcoholism is poorly understood. Furthermore, the very nature of these complaints makes them difficult for the evaluation of symptoma-

tic treatment. They are subjective and at times ephemeral, and can be altered by many of the things that happen in the patient's life. Although any attempt to quantitate aspects of the clinical approach for statistical handling has many limitations, it seems likely that it can be refined and that, with more careful application, some of the changes not induced by drugs, which reduce the sensitivity of the method, can be weeded out.

At present, the evidence indicates that drugs of the antipsychotic or antidepressant type are of limited or no value in the treatment of alcoholics except in those cases where there are also present symptoms of psychosis, acute depression, or alcohol withdrawal. There is no evidence to indicate that the drugs are of value in the treatment of alcoholism as an entity. The sedatives pose problems of being abused and addictive, but have some advantages over a placebo for short-term treatment. Apparently they can give a sense of well-being, but this is generally not lasting and apparently does not decrease the likelihood of drinking. Of the sedatives, the newer ones of the benzodiazepine series have the advantage of longer action and do not depress respiration. Disulfiram, a drug that can be a deterrent for anyone who wishes to avoid drinking, has not been conclusively shown to be an effective treatment. Those who are motivated to take the drug but do not get it maintain sobriety as well as those who are given the drug. The hallucinogens, such as mescaline and LSD-25, are enthusiastically proclaimed by some for the treatment of alcoholism. There are many anecdotal reports of remarkable recoveries from chronic, excessive drinking following treatment with these drugs—but as yet there are not enough controlled studies to conclude whether it is the effect of the drug or the enthusiastic endorsement of the type of experience they can produce in some people.

Enthusiasm for a treatment procedure and concern and liking for a patient will favorably affect the patient's condition, and skepticism and dislike will unfavorably affect the patient's progress and sense of well-being. Then, too, the success of a given therapy depends on the therapist's ability to mobilize the patient's expectation of help. Thus, the giving of a placebo can produce a great deal of benefit, or harm, depending on the doctor-patient relationship. Drugs, to be of benefit for the alcoholic, must be significantly better than a placebo. Unfortunately, although drugs are widely prescribed, there is little evidence to support the use of very many. Since they are more widely used than evidence warrants, one can only conclude that they are used in ignorance or desperation, which in effect is treating the doctor and not the patient.

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