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Editorial

Alcohol Rehabilitation: Fact or Myth?

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Never before in our history has the problem of alcoholism been given so much attention. Huge sums of public and private monies are being expended in an attempt to find the cause (or causes) of this condition, and there has been a headlong rush to blanket the country with treatment programs, established not only in medical centers and specialty clinics but in a variety of small community hospitals and "store-front" operations. They address themselves not only to the general issue of alcohol abuse but to specific subsets of problems, such as the drinking driver, alcoholism in industry and business, and the effectiveness of military personnel. However, there is no general agreement on what is (are) the most effective method(s) of treatment and certainly very little evidence that some programs are better than others. Indeed, it may be that not only do certain programs have no effect at all, but some may even be harmful! In addition, many programs are based on some vague assumption that "more is better," overlooking the possibility that different techniques may not be synergistic, and some may be antagonistic. When such a program is evaluated, positive results may be thereby masked and overlooked. The potential for the waste of valuable resources is also apparent.

It is obvious that if we are to make progress in the field of treatment a great deal of research must be addressed to these questions, not only as a way of determining cost-effectiveness, but we will never be able to improve our treatment methods until we have sound empirical evidence identifying those programs worthy of expanding and/or improving. This is (or should be) of

primary concern not only for researchers but for clinicians and policy makers who must be able to evaluate data concerning treatment programs and avoid counterproductive decisions about treatment techniques and public policy.

There is a long list of pitfalls facing those who must try to accept or reject those data purporting to demonstrate the effectiveness of various alcohol rehabilitation programs. These include, for example, a lack of a satisfactory definition of "alcoholism." Is it really a disease? Is it determined by genetics, learning, culture, a virus? And who is an "alcoholic?" Is he measured by how much he drinks, how often he drinks, the amount of social and physical damage he causes? Is it true that "once an alcoholic always an alcoholic?" Obviously, if we cannot define something it is hopeless to try and measure the effect of treating it. As noted by Jacobsen, ". . . there is growing recognition . . . that the current concept of alcoholism may be inadequate at best and misleading at worst Rather than continue the chimerical pursuit of a 'typical alcoholic' or a unitary 'alcoholism' it would seem more reasonable and prudent to entertain the idea that there may be several *alcoholisms*, which, once detected, assessed, and diagnosed, may be amenable to different treatments" [1]. In the field of treatment of the drinking driver there is already evidence that while the driving record of some groups may be very amenable to treatment, for others there appears to be no program that is effective [2, 3].

In similar fashion there is no agreement upon what constitutes "successful" treatment. Is it total abstinence? If so, for how long? Is it controlled drinking, or is that simply inviting disaster? Is it improved social adjustment? Or perhaps we should merely accept a lesser goal, such as a reduction in death and injury on the highway and in industry? Or a combination or pattern of the above?

The list of methodological problems continues, and for an excellent review of others the reader is referred to Pattison *et al.* [4]. But based only on these few problems it is clear we are a long way from being able to formulate productive guidelines within which to evaluate our treatment efforts. In effect, we are trying to measure the result of treatment by criteria upon which we cannot agree and for a condition the nature of which is unknown. Truly an example of the proverbial "can of worms."

Perhaps the most frequent data which one encounters is the simple figure representing a program's success rate, usually in percentages. The range appears to be about 5% "success" for chronic skid-row alcoholics to 80-90% for well-motivated executives in company-sponsored programs. As seductive as these figures may seem, they are meaningless. Everything in life is indeed relative—if we state a program has a 50% success rate we must then ask,

“Compared to what?” Is that 50% rate better than effected by another program? Is it better than no treatment? An excellent example of this issue may be shown by previously unpublished data gathered on a well-known alcoholism rehabilitation program in the U.S. Navy.

Eighty-seven subjects were studied when subjected to an intensive treatment program, including detoxification, medication, Antabuse, individual psychotherapy, group psychotherapy, marriage counseling, weekly psychodrama sessions, Al-non and Al-teen programs for the families, AA meetings, and a 90-day inpatient stay, if necessary. Furthermore, they were retained in the program until they were deemed fit for return to full duty. In addition to this impressive array of services, the leadership and staff were, in this author’s opinion, enthusiastic and dedicated. In a 1-year follow-up of these 87 patients they were rated and placed in one of three treatment outcome categories: (1) definitely improved, (2) slightly improved, and (3) unimproved. Sailors who had received no disciplinary action, had qualified for reenlistment at time of follow-up, and whose drinking did not adversely affect their professional performance and military behavior as judged by their annual fitness reports were rated as “definitely improved.” Men who incurred minor disciplinary offenses subsequent to release from the rehabilitation clinic, but who had performed their duties adequately and were recommended for reenlistment were classified as “slightly improved.” Subjects rated as “unimproved” were those whose drinking adversely affected their performance to the extent that they were not recommended for reenlistment or those who required readmission to the sick list because of chronic alcoholism. On this basis the treated subjects were categorized as follows:

Definitely improved	18 (21%)
Slightly improved	18 (21%)
Unimproved	<u>15 (58%)</u>
Total	87

This suggests that the alcohol rehabilitation program could claim a success rate of at least 42%. (A figure which contrasts sharply with the 82% “success” rate publicly proclaimed but with criterion not defined.) This figure approximates those given by a wide variety of rehabilitation clinics throughout the nation, and to the unwary such data might be used to justify the continued expense of supporting the program and perhaps extending it throughout the military.

However, when this treated group was compared with a control group the picture changes. This second group consisted of men returned to duty from

various naval hospitals after having been admitted to a general medical service only for detoxification. They were matched man-for-man with the 87 subjects treated in the rehabilitation program on the basis of the following variables: (1) a primary diagnosis of alcoholism, (2) date of release to duty from the sick list, (3) pay grade (i.e., rank), and (4) length of naval service. They were also placed into one of the three outcome categories described above with the following results:

Definitely improved	20 (23%)
Slightly improved	13 (15%)
Unimproved	<u>54 (62%)</u>
Total	87

This would suggest a "success" rate of 38%. When these results from the two populations were placed in a chi-square format, it produced the pattern shown in Table 1. It now appears that the two methods of treatment produce essentially similar results, and the differences do not remotely approach statistical significance. Furthermore, one must consider the tremendous cost differential between an elaborate alcohol rehabilitation program vs a simple detoxification program appended to an already existing general medical service.

It is not surprising these data were never published. After circulation as an in-house memorandum, they were quietly filed away. The field of social research is replete with anecdotes about embarrassing data being allowed to die a graceful and quiet death, as well as a tendency for investigators (and journal editors) to feel reluctant to publish "nonsignificant" findings. This compounds the problem, of course, and serves only to make it more difficult to answer the question: "Does alcohol rehabilitation *really* work?"

Lest the reader conclude that this author is taking the position that alcohol rehabilitation, *per se*, is noneffective, it should be pointed out even these data do not necessarily show that this program was ineffective and/or not cost-effective—and for precisely the reasons enumerated at the beginning of this editorial. Since the patients were treated in the aggregate, it is possible that certain subtypes achieved an improvement rate superior to that of simple hospitalization, and that certain patients were made "worse" by treatment (not an untenable hypothesis), thus statistically canceling out the improvement made by others. Finally, such a program may produce quite different results if evaluated against other criteria of improvement. These questions can only be answered by careful attention to the methodological issues described herein and structuring treatment programs accordingly.

Table 1. Degree of Improvement of 87 Matched Pairs ($N = 174$) of Alcoholics Treated by Naval Alcohol Rehabilitation Center and Those Treated at Various Naval Hospitals by Detoxification Only^a

Degree of improvement	Rehab Program subjects ($N = 87$)	Hospital subjects ($N = 87$)
Definitely improved	18 (21%)	20 (23%)
Slightly improved	18 (21%)	13 (15%)
Unimproved	51 (58%)	54 (62%)
	87	87

$$^a\chi^2 = .78 \text{ (df} = 1; p = .40 \text{ [N.S.])}.$$

While the current state of affairs in the field of program evaluation is confused and often misleading, it need not so continue indefinitely. The investigative techniques and personnel required are available. If part of those resources now earmarked for service programs are allotted to research, the issues presented in this paper may eventually be resolved, and our patients, clinicians, and taxpayers may feel more assured that our resources are being used effectively.

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