ASSESSMENT ISSUES IN PROBLEM DRINKING
AND
REHABILITATION OUTCOME

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Summary

The evidence on the importance of linking assessment and rehabilitation is summarized. While it is at present possible to make only very general statements about this literature, it is clear that recidivism can be reduced when offenders are assigned to appropriate programmes. As well, some suggestions for improving the traffic safety benefits of assessment and rehabilitation are offered.

Introduction

With increasing understanding of the role of alcohol in traffic fatalities came evidence that a large proportion of both drinking drivers and of those involved in accidents had problems with alcohol, and also suggestions that directing these individuals to rehabilitation could reduce road accident deaths and injuries (e.g., Schmidt and Smart, 1959). The first specialized rehabilitation programmes began to appear in the 1960's and the 1970's, and in at least some parts of the world they have continued to expand and flourish. The purpose of this paper is to provide an overview of the effectiveness of these programmes (with particular regard to reducing recidivism) in the context of the alcohol problems observed among offenders. Then some issues will be considered which may need to be addressed if we hope to improve our ability to assess and treat offenders effectively.

Evidence Linking Assessment, Programme Type and Outcome

Early evaluations of rehabilitation programmes revealed a variety of outcomes, ranging from positive effects to no effects to detrimental effects. However, the majority of these studies were quasi-experimental in nature, and interpretation was made difficult by methodological concerns (Mann et al., 1983). Perhaps the strongest conclusion that can be drawn from these earlier studies is that substitution of rehabilitation for license suspensions cannot be supported on traffic safety grounds. License suspensions have important traffic safety benefits that rehabilitation programs should supplement, not replace (Hagen et al., 1979; Mann et al., 1983; Nichols et al., 1981; Peck et al., 1985; Preusser et al., 1976).

Subsequently, perhaps as a result of increasing requirements on the part of traffic safety officials to demonstrate what, if any, benefits treatment can provide, a series of studies has appeared which are remarkable, in the general field of treatment for alcohol problems, for two reasons. First, these studies are characterized by methodological strengths which are rare elsewhere, including random assignment, use of no treatment control conditions, large sample sizes, objective outcome measures and long follow-up intervals (two
years or more). Second, these studies provide the clearest empirical support for matching of clients to treatment types.

This work has been described in detail (Mann et al., 1989) and will be summarized here. Inspection of the relevant studies suggests that in order to make comparisons across studies, offenders can be divided into two types and programs can be divided into three types. The first type of offender can be generally described as the "low alcohol problem" offender. These individuals are typically first offenders (e.g., Reis, 1983) or have few indications of alcohol problems (e.g., low arrest BAC, low scores on alcohol problem scales, Landrum et al., 1982). The second type is the "high alcohol problem" offender, who is a second offender (e.g., Reis, 1983) or has a larger number of indicators of alcohol problems (e.g., Landrum et al., 1982).

While there is substantial variety in the types of programmes used in this field, evaluated programmes can be divided into three general categories. The first type may be described as educative programmes. These programmes are often based on the Phoenix model (Malfetti and Winter, 1980) and typically involve a small number of sessions where information on alcohol effects, traffic safety and alcohol problems is provided in lecture or small-group format. The second type may be described as short-term structured treatment programs. These approaches make assumptions about the nature of offenders' problems and provide a brief programme to alleviate those problems, typically social skills or assertion training (e.g., Holden, 1983). The third type of program may be described as long-term individually oriented. These programs involve long-term individual or group contact (6 months or more on an outpatient basis), and may include, as components, education, social skills training and case management/probationary supervision.

The effects of treatment (compared to no-treatment control conditions) on recidivism over follow-up intervals of two years or more, when offender and programme type are taken into account, are presented in Table 1. For low alcohol problem offenders the balance of information suggests that educative programmes may have some net benefits; there is not yet sufficient information to draw conclusions about other types of programmes. For high alcohol problem offenders, the effects of educative and short-term rigid format programmes are not detectable or even adverse; some programmes appear to have increased recidivism (Nichols et al., 1978). However, long term, individually oriented approaches appear to reduce recidivism. The consistency of this observation is underscored by a recent follow-up of the Landrum et al. (1982) sample by Wells-Parker et al. (1988, 1989), who found significant benefits of this approach 10 years after convictions, and also that individual factors interacted with programme type, in ways more complex than presented here, to determine outcome.

**Improving the Traffic Safety Benefits of Assessment and Rehabilitation: Speculations**

The summary of the evidence provided above makes clear the interdependence of assessment and treatment in determining rehabilitation outcome. This information represents the strongest data in the alcohol problem field in general on the importance of matching of clients (or offenders) to treatment, and it clearly provides a stimulus for efforts to improve assessment procedures, rehabilitation programmes, and their coordination.
1) Improving the Validity of Drinking Problem Assessment. One area where improvements might be made is in the validity of assessment of drinking problems. In many cases there are clear incentives for offenders to distort drinking problems (e.g., greater leniency by the courts); even where these incentives do not exist, offenders may still believe that they do.

Several authors have proposed means to maximize the validity of assessment (e.g., Skinner, 1981); two are worth specific mention here. First, assessment should occur in a non-threatening context, where it is clear that the results will not have adverse or beneficial consequences for the individual. Second, multiple indices should be employed. In this regard, obtaining biochemical markers can serve a two-fold purpose. They provide an independent measure of problem drinking (Gjerde et al., 1986), and, because they are a physical measure, may serve to increase the validity of clients' self-reports.

2) Taking into Account Problems Other than Alcohol. One of the more notable developments in the assessment of drinking-driving offenders is the demonstration, in recent years, that these individuals tend to differ from control groups on a large number of clinically relevant dimensions, and that factor and cluster analytic techniques seem to be able to specify sub-groups of offenders (e.g., Donovan and Marlatt, 1982; Wells-Parker et al., 1986). These findings suggest a number of questions, among which two may be of particular relevance. First, to what extent are these other dimensions related to, or orthogonal to, alcohol problems. For example, elevated depression may be caused by or a cause of abusive drinking, or it may be totally unrelated. The clinical implications of these three alternatives are very different. The second, and related question is what are the program implications of these findings. At present we do not yet have the resources or the empirical data which would allow us to adapt our programmes to take these observations into account, although this is clearly a direction in which we should be moving.

3) Accident Reduction as a Programme Focus. A final issue is the accident reduction potential of rehabilitation programmes. While accident reduction is the most important outcome we hope to obtain, we typically tend to focus our immediate attention on reducing drinking and driving. Thus, assessment measures, programme content, and evaluation criteria emphasize reduction of drinking and driving. We have seen that we are successful in achieving this goal, at lease in terms of reduced recidivism. However, an analysis of the research literature provides little information on programme effects on accidents; what little data are available (e.g. Preusser et al., 1976) suggest that these effects may be minimal, and in some cases even detrimental.

There are methodological and statistical reasons why programme effects on accidents may be difficult to observe. For example, while there is no doubt that the individual who is reconvicted has in fact been drinking and driving, an accident may, for a variety of reasons, be completely beyond the control of the individual. Thus the specificity of accidents as a measure is much less than that of reconviction. However, there is also research to suggest that offenders most likely to become involved in accidents tend to differ in some ways from those most likely to be reconvicted of a drinking-driving offense (e.g., Mann et al., 1987; Donovan and Marlatt, 1983). Thus, in our efforts to prevent the latter, we may miss opportunities to prevent the former.

References


Table 1. Effects of Rehabilitation Programmes on Recidivism when Programme and Offender Types are Considered

1) "Low-Problem" Offenders

<table>
<thead>
<tr>
<th>Programme Impact</th>
<th>Education</th>
<th>Short-Term, Rigid-Format</th>
<th>Long-Term, Individually Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on recidivism not detectable or negative</td>
<td>Holden 1983</td>
<td>Landrum et al. 1982</td>
<td>Holden 1983</td>
</tr>
</tbody>
</table>

2) "High-Problem" Offenders

<table>
<thead>
<tr>
<th>Programme Impact</th>
<th>Education</th>
<th>Short-Term, Rigid-Format</th>
<th>Long-Term, Individually Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on recidivism not detectable or negative</td>
<td>Blount et al. 1983</td>
<td>Landrum et al. 1982</td>
<td>Blount et al. 1983</td>
</tr>
<tr>
<td>Positive impact on recidivism</td>
<td>Nichols et al. 1978</td>
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<td>Nichols et al. 1978</td>
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