BEYOND TREATMENT: THE ROLE OF THE MEDICAL PROFESSION IN PREVENTING DRUNK DRIVING

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SYNOPSIS

Ever since Benjamin Rush, the Philadelphia physician, first described alcoholism ("inebriety") as a disease in the U.S., the American medical profession has increasingly assumed responsibility for its treatment. A further responsibility revolves around efforts at primary, secondary, and tertiary prevention. This paper discusses a unique collaboration of a Medical Advisory Board with the Motor Vehicle Administration in Maryland to reduce fatalities and injuries on the highways consequent on drunk driving. By personal interviews, recommendations for treatment, and follow-ups on violators who were convicted more than once, significant reduction in moving violations can be recorded.

INTRODUCTION

Nowhere is the ambivalence of society's attitude toward drinking alcoholic beverages more destructively evident than in the management of the problem of drunk driving. Recent years have seen the efflorescence of many newly established treatment centers for victims of alcoholism and dependence on other drugs (National Directory, 1981). The "substances abuse" authorities of many state governments in the U.S., in cooperation with transportation authorities, have developed specialized programs for detecting those who drive with blood alcohol levels above the legal limit and then referring them for evaluation and possible treatment, all within due process and the safeguard of civil rights (Weisman, 1970). Yet the senseless carnage on our highways continues without appreciable abatement (NIAAA, 1981).

Public service television announcements routinely inveigh against "drinking and driving," news stories almost daily reveal the staggering damage to human health and economic loss running into billions and billions of dollars, and an enraged and anguished citizenry, appalled by the slaughter of loved ones, have finally banded themselves together into a militant, political force as Mothers Against Drunk Driving (MADD, 1980). In the vast majority of cases,

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however, of individuals who are found to be driving while impaired by alcohol, this condemned behavior is treated rather lightly not only by the public but by the courts (Ross, 1982). Too often a "there-but-for-the-grace-of-God" attitude can be sensed in the general populace as well as in the judiciary. Only when a fatality occurs are the "killer-drunks" regarded with gut-level horror and the air is shrill with cries of "lock them up and throw away the key" or "off with their heads."

Nor can it be said that the "experts" in our professional field of concern are unified in their conceptualization of the problem or in their approach to laws concerning deterrence of drinking and driving. A recent review of the literature evaluating the Scandinavian-type laws adopted by such varied countries as the Netherlands, France, the U. K., and others, although pointing to a convergence of findings, is not very sanguine about their effectiveness (Ross, 1982). Although such laws have, in fact, had a deterrent effect on crash-related deaths and injuries, even greater where they have been more highly touted and publicized in the "media," the effect has, apparently, proved to be evanescent. Modification of behavior through fear of legal punishment does not persist and, in relatively short order, crumbles and disintegrates.

As long ago as 1947 the Legislature of the State of Maryland took a historic step by creating a Medical Advisory Board (MAB) to assist the Motor Vehicle Administration (MVA), in evaluating, on an individual basis, any motorist whose physical or mental disability might make him or her a potentially dangerous driver (Maryland Motor Vehicle Administration, 1973). The Board and its procedures have become, since then, a sometime model program which has served as an inspiration to 40 other States. Currently, composed of 54 physicians appointed by the MVA Administrator, the Board is under the chairpersonship of Dr. Ruth Baldwin and meets in groups of from 3 to 5 on several evenings each week throughout the year. Each physician is a specialist in an area of medicine relevant to a driver's ability to operate a motor vehicle.

The Board's function is advisory and serves solely to evaluate the driver, following which a recommendation is made. The actual decision whether or not to license, suspend, or revoke is made only by MVA Administrator who is invested with such authority by law (Maryland Vehicle Law, 1980). It is important to note that the objective of the Board is not to prevent a person with a medical problem from driving but to assure that his or her medical condition is under the best possible control, consistent with the ability to drive safely.
Referrals to the MAB for evaluation may be made by any division within the MVA, such as Driver Examination and Licensing, Driver Review and Rehabilitation, and Administrative Adjudication, which holds hearings. In addition, individuals may be brought to the attention of the Board by law enforcement agencies, judges, attorneys, other physicians or hospitals, or by citizens' complaints which are then investigated by the MVA. Self-referrals may also be made. Where indicated the Board will attempt to obtain pertinent medical information from the individual's personal physician and/or the treating hospital.

After a preliminary review of the record by a screening physician, the individual is called in for a face-to-face interview. Interviews vary in length from only a few minutes to ½ hour, or longer if necessary, at the end of which time the Board agrees upon a recommendation to the MVA Administrator. It may recommend that the Administrator:

1. Take no action.

2. Permit the individual to drive but require periodic medical reports to the Board.

3. Permit the individual to drive with certain restrictions noted on the license.

4. Suspend the license until the medical problem is corrected or controlled.

5. Suspend the license with instructions for the individual to reappear before the Board after a specific period of time.

Individuals may have to be reevaluated in this fashion several times. In many cases drivers disapproved on one or more occasions may be approved at later visits when their medical conditions have improved.

The MVA Administrator after reviewing the advisory opinion and recommendations of the MAB will inform the individual of his decision concerning the individual's license. If the individual wishes to contest the proposed action of the Administrator, an administrative hearing may be requested. Such hearings are conducted by a hearing officer in accordance with the MVA Code of Maryland Regulations. If the individual is aggrieved by the decision of the hearing officer, he/she may appeal to the Circuit Court.

All records of the MAB are held in strictest confidence and subject to the laws of confidentiality.
METHODS

Ever since 1947 when the Board was first established it was cognizant of the noxious effect of alcohol on driving performance. In addition to calling in the victims of diseases of the cardiovascular system (rheumatic heart disease, arteriosclerotic heart disease such as angina pectoris, myocardial infarction, etc.), of the endocrine system (diabetes mellitus, hypoglycemia, etc.), of the nervous system (epilepsy, narcolepsy, etc.), the Board also scheduled individuals with behavioral difficulties such as schizophrenics, manic depressives, and alcoholics (Maryland Department of Transportation, 1972). It was clear, however, that most physicians knew nothing about alcoholism as a disease! Medical schools had not generally included alcoholism per se in the curriculum as a disease entity (Weisman & Seixas, 1974) and the American Medical Association had not yet issued its policy statement declaring alcoholism to be a disease and calling physician's attention to their responsibility to treat it (American Medical Association, 1956).

Following a meeting in the 1950's, the first meeting with an outside speaker during which Dr. Isadore Tuerk addressed the group on recognizing alcoholism as a primary disease entity and on the need to give consideration to this problem, the Board focused the education of physicians on drunk driving. The Board helped establish the attitude of the MVA that drivers who were convicted only once would be considered "social drinkers" with the assumption that their drinking could be kept under control and that they would be careful enough not to be cited again. Only those who had more than one conviction for operating a vehicle in an intoxicated condition would be referred to the MAB for evaluation. At the interview, the individual's medical records, if any, were reviewed and if it was determined that the disease process of alcoholism might be involved one of the following procedures would be indicated:

1) The individual would be restricted from driving for 6 months and re-evaluated at the end of that time.

2) The individual would have to report to a recognized alcoholism treatment program (A.A., alcoholism clinic, or private alcoholism counseling agency) for 6 months with a report from the treatment source at the end of that time.

3) If re-evaluation was favorable, the individual would be placed on the "alcohol restriction" program and a license re-issued and so marked,
indicating that if the individual while driving were stopped by an officer of the law for any reason and he/she had even a suspicion of the use of alcohol, a report would be sent to the MVA for administrative action and the license suspended.

4) The individual would be required to continue with the treatment program or with a medical doctor and return to the MAB in 3 to 6 months with another report from the treatment source evaluating the individual's participation in the rehabilitation program.

5) Trained MAB investigators might be asked to complete and submit a field report before the individual would be seen again by the MAB.

RESULTS

Statistical results of the program were presented at a teaching seminar held by the MAB in 1981 (Baldwin, 1981). Figures for moving violations were compiled in 1979 and covered 25 years. Ages ranged from 16 to 99 years and were separated in 5 year groups. In all of these groups, the violations dropped remarkably, anywhere from 25% to 80%." Figure 1 reveals, for example, that, in the 46- to 50-year age group, 218 drivers had a total of 1,762 moving violations before being seen by the MAB and 117 drivers had 270 violations after being seen. A review of these cases since this policy and procedure went into effect reveals that only a few of the individuals had violations for operating in an intoxicated condition and many had no violations at all. (In the event of a subsequent alcohol violation, the driving privilege could be suspended by emergency action for violation of the alcohol restriction.) Note that the number of drivers remained fairly constant in each age group, around the 100 mark, except in the leap in the 16- to 30-year age group from 16 to 133 drivers. After 55 years of age the number of drivers gradually decreased until only 5 drivers were listed with violations at the 70-year age period. Following this age group, there were no violations noted. Thus, there was not only a decrease in violations but in the number of drivers with violations after reaching 50 years of age. On the average, half of the drivers who had been placed on alcohol restriction had a marked decrease in moving violations (see, also, Table 1.)

In Figure 2, the drivers were divided into 3 groups by age and sex. The youngest group, from 16 to 25 years of
age, comprised 99 drivers who had 544 violations before being seen. After being seen there were 66 drivers who had 261 violations. We know, of course, that there were many drivers in this age group who had only one conviction and therefore were not seen by the MAB and that the mortality in this age group is extremely high for driving while intoxicated. The number in this group is therefore, probably, under-represented.

In the second group, from 41 to 50 years of age, were 439 drivers who were referred to the MAB after a second conviction of operating a vehicle while intoxicated. These drivers had 3,569 violations before being seen. After being seen there were 223 drivers with 502 violations. The number of violations dropped to 1/7 after being interviewed with only about 1/7 of the drivers having violations. One should note that this age group had the highest number of females, 18 compared to 203 males and 63 violations compared to 1,734.

The third group, from 66 to 75 years of age, included 25 drivers with 187 violations before being seen and 7 drivers with 16 violations after being seen. Undoubtedly some had died, some were no longer driving and fewer miles were travelled.

In the age group of 76 to 99 years, no drivers with second convictions appeared and, hence, no violations.

CONCLUSION

Although the data are admittedly spare in detail, they clearly indicate an improvement in the driving record following evaluation and recommendation by a Medical Advisory Board. There was definitely a marked decrease in violations and fewer convictions for operating in an intoxicated condition among drivers involved in the MAB Program. A more controlled study will be developed to confirm the tentative conclusion that when drivers found guilty of operating a vehicle in an intoxicated condition are followed by a medical advisory board, with alcohol restrictions imposed and encouraged to produce evidence of abstinence and participation in some form of treatment or counseling, a remarkable decrease in moving violations is recorded.

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Figure 1. Distribution of violations, prior to and after MAB, as related to age.

Figure 2. Effect of MAB, by age and by sex.