SPECIAL ARTICLE

THE PHYSICIAN AND TRAFFIC SAFETY

Those who are charged with the duty and responsibility of traffic management and of the public safety problem which it presents need the skilled thinking and co-operation of members of the medical profession in improving the traffic safety conditions.

By
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Those in the field of law enforcement and public safety have a great deal in common with those who are engaged in the healing arts, for the basic mission of personnel in both fields is to protect the lives and property of the people they serve. Probably, however, many workers in both professions fail, from day to day, to realize just how closely related their endeavors are, and how much they could benefit by giving greater attention to the other profession's problems and needs.

I shall attempt to document the massive problem of public safety which is apparently inherent in our modern transportation system. In your profession as in mine, I am sure, cold, hard figures compiled by the calculators have a way of going in one eye or ear—and out the other. In spite of this, however, it is part of the job of both of our professions to try constantly to inform the motoring public of the magnitude of the tragedy of death, suffering, and economic loss on the streets and highways. Although there is no way to determine whether the message is getting across, an information program is obviously essential. Our product is public safety, and it has long since been determined that no product of any kind can be sold without advertising.

Our transportation system expands with the progress of Texas and the nation. During 1960 2,254 persons were victims of motorcide in Texas. (This term means the killing of another human being or of one's self through the operation of a motor vehicle, and usually as the result of negligence or of wanton carelessness.) The traffic mortality rate represents a large segment of human life. Visualize, for example, a crowd of 2,254 people in a large ballroom,

The other day the corridors of the heaquarters building of the Department of Public Safety in Austin were filled with nearly 200 visiting Boy Scouts. As familiar as I am with the traffic figures, it nevertheless shocked me to realize that nearly this many Taxans are killed in traffic crashes every month.

Only by comparisons such as these can the magnitude of the tragedy of traffic deaths be appreciated. I fear too many persons are inclined only to see or hear the figures and to think that little can be done about them. Yet, by comparison with other years, 1960 was a "good" one for traffic safety in Texas. The death rate

on the streets and highways for the number of miles traveled was the lowest on record, and was considerbly below the national average. In 1960, 199 fewer persons died in traffic accidants than in 1959. That's a crowd about as large as the group of Scouts who recently visited our Department's headquarters.

Indeed, this eight per cent reduction in traffic deaths in 1960 is heartening. For it proves that something can be done about the loss of life because of motorcide in Texas. The Department's records indicate that without a doubt, the greatest single factor in reducing traffic death is for the driving public to obey the safety laws and regulations. This must be so, for in almost every fatal accident at least one violation is involved.

Death is not the only tragedy of the highways. Injury and economic loss represent a heavy toll, as well. Is it not difficult to comprehend that 13 of every 1,000 Texans were injured in traffic accidents during 1960? Nearly 130,000 persons were hurt—a number almost equal to the entire population of Lubbock. In addition, the economic loss represents approximately $350,000,000. This means that every minute $664 goes down the drain, mostly as the result of carelessness or of inability to handle a motor vehicle properly!

Yes, the traffic toll and its ramifications amount to a major disaster; yet too many people accept it as commonplace and as something about which nothing can be done.

THREE BASIC INGREDIENTS

There are three basic ingredients involved in the problem of traffic accidents: roads, vehicles, and people. The records show that relatively few accidents are caused by road defects and vehicle defects. Perhaps it shouldn't be said that most of the trouble is caused by "defective people" but, in a sense this is true. The major causes for these accidents which exact such a heavy toll are human "defects" such as driving too fast for conditions, driving while drinking, wrongfully assuming the right-of-way, and driving on the wrong side of the road. Last year, 60 per cent of the fatal highway accidents outside city limits involved only one vehicle; in other words, there was no "other guy" to blame in most cases.

To attempt to delve into the reasons for all of these human actions that result in mishaps seems a staggering task with little hope for enlightenment. With so much at stake, however, it behooves all who might be in a position to improve the situation to probe deeply for reasons and remedies.

In traffic accident investigation, police seek to find what happened in an accident, how it happened, and why it happened. Most accidents are caused by driver deficiencies. In accident investigations, the driver, the vehicle, and the environment, including the roadway, are examined. In the driver's examinations, an attempt is made to determine if a deficiency in his natural ability, in his acquired capability or in his character caused the accident.

Particularly with relation to natural ability, clear statements are needed from medical authorities concerning the minimal physical qualifications required for driving so that adequate control standards may be adopted and applied. In regard to character, which deals with attitudes and emotions, psychologists and psychiatrists should help to establish minimal standards of maturity and stability to be required in qualifying drivers to operate powerful machines and to share the public highway with others.

Of particular significance to members of the medical profession are four sets of circumstances which may influence the natural ability, the acquired capability, and the character of the driver. These are: (1) poisons, including alcohol, narcotics, and carbon monoxide; (2) medicines, including antihistamines, insulin, barbiturates and benzedrine; (3) disease, including epilepsy, heart disease, diabetes, and insanity; and (4) fatigue, which includes exhaustion, tension, and monotony.

In accident investigation, the officer is particularly interested in ascertaining if any of these circumstances are present in drivers. Driving under the influence of alcohol or drugs, which include medicines that would impair ability to drive, is forbidden by law.

Law enforcement officers particularly need from the medical profession endorsement of the percentage of blood alcohol proclaimed by scientists as the amount which will produce impairment in a driver. In addition, in their treating of patients, physicians need to emphasize the effect that certain drugs might have on the individual's ability to drive.

It is the highway patrolman's responsibility to detect in drivers pertinent defects in behavior and to take immediate action to prevent that behavioral defect from causing an accident or from impeding traffic. To do this, he stops the existence of the defect at the moment remedies it if it is of a temporary nature, and takes steps to prevent its repetition by prosecution and penalization if it is in the nature of a law violation.

In law enforcement, the same things, in general, are needed from members of the medical profession as in accident investigation. These are: minimal physical and mental standards for drivers, special attention by all practitioners to the effect on driving ability of drugs used in treatments, endorsement of accepted percentages of blood alcohol that cause impairment of driving ability, endorsement of the Department of Public Safety's methods to test blood alcohol, and public information programs by medical organizations giving facts pertinent to traffic safety.

The crux of the problem of joint action between the Department and the medical profession for greater traffic safety can be illustrated by an actual incident. In 1958, the Department revamped its recruit training program and scheduled a session on the various aspects of drivers with medical problems. A physician agreed to help instruct. Admitting the need for assistance, he sought the advice

of some of his fellow physicians. After several unrewarding conferences, he was referred to the National Safety Council which, in turn, referred him to the Traffic Insitute of Northwestern University. The Traffic Institute unaware of all that had gone before, referred him to the Texas Department of Public Safety. The doctor and the Department have been working together on this problem ever since. They are still looking for opportunities for assistance, as from this conference.

Certain current driver licensing activities touch upon the field of medicine. For example, on the original license application form, the applicant is required to answer questions pertinent to his basic physical and mental qualifications to drive a motor vehicle. An applicant who has been a patient in a hospital or other institution for mental ills, epilepsy, "spells", dizziness, seizures or similar disorder, alcoholism, or drug addition must present a certificate from the hospital or institution showing that he has been discharged or cured. An applicant who has been subject to any of these disorders but who has not been a patient in a hospital or institution must present a statement from a competent medical authority certifying his ability to drive safely.

If, during testing and questioning, information indicating that the applicant has a serious heart condition, severe diabetes, or any other similar type of disability or ailment is elicited, he is not licensed until he has been examined by a medical authority, who must submit a statement relative to the applicant's ability to drive safely. In andition to the questions asked regarding physical disabilities, a separate visual acuity test is always given. Applicants who do not meet definite standards are referred to specialists for complete examinations, which are reported to the Department on special forms for this purpose. Based upon physicians' statements as required and information obtained in the Department's own tests, applicants may be restricted in their driving to areas or conditions under which the task may be performed in a reasonably safe manner.

In an effort to determine continued competence of the driver for renewal of license, the Department requires a statement from the applicant that there has been no major change in his physi al or mental condition subsequent to the date on which his license was last issued. Recently a procedure has been inaugurated whereby the examining officer notes on the original application form in special cases that the applicant should be re-examined for each renewal of license. In such cases the licensee's file is flagged in headquarters; shortly before the expiration of his driving permit, he is reminded that he must submit to re-examination before his license can be renewed. Depending upon the applicant's condition, an examination by a physician may or may not be required. In addition, applicants who have undergone changes that may have affected driving ability may be restricted when their licenses are renewed.

In the interim between original examination and renewal of license, several control actions may be taken. A petition may be filed for suspension of the

driver's license if he is incapable of driving a motor vehicle. The license is automatically suspended by a conviction on the charge of driving while under the influence of alcohol or narcotics. A finding by a court that a licensee is insane, "feeble minded," a habitual drunkard, or an epileptic, or that he is addicted to the use of narcotics, requires a revocation of license. In cases in which there is insufficient evidence for definite action, investigations are made and interviews held with the licensee to determine the appropriate corrective action, such as suspension of license. Many of these cases are of such a nature that the Department must rely upon information and advice supplied by a member of the medical profession in determining their proper disposition.

For some time, throughout the country, there has been considerable discussion of proposals that would require physicians to report on the apparent driving ability of their patients affected by physical or mental conditions. In the absence of such required reporting and of the Department's inability to conduct periodic re-examinations of all drivers, many factors about the average licensed driver are not known. For example, the number of drivers with unfavorable medical reports or infirmities is not known, nor is the number who may be taking, by prescription or self-treatment tranquilizers, sedatives, antihistamines, or other drugs which affect driving ability, The Department is unaware of how many applicants with significant changes in driving ability sign the license renewal statements with little regard for their provisions. Likewise, it is not known how many swear to the original application with little regard for its provisions, furnishing no accurate information on previous medical history.

To insure the original and continuing fitness of drivers, many suggestions have been offered. These include periodic examination of all drivers, periodic medical examination of all drivers, required reporting by physicians of conditions affecting driving abilites, elimination of license renewals by mail, and greater attention to the problem of safe driving ability in the individual physician-patient relationship.

The following suggestions are worthy of immediate exploration and development by members of the Texas Medical Association.

1. That the physician advise all seriously handicapped and unqualified patients to discontinue driving.

2. That personal attention to individul driving skill be given by all physicians, not only to set an example of leadership by professional groups but also to sustain the individual physician's interest in the problem.

3. That increased educational activites and publicity on the medical aspects of safe driving be conducted by medical associations.

4. That study be given to the pros and cons of required reporting of certain types of diseases and conditions by physicians and agreement reached on final ecommendations.

5. That the topic of traffic safety continue to be placed on the agenda of medical meetings to create and sustain the interest of an ever-growing number of physicians who must contend with the problem of repairing and treating accident victims,

6. That every physician become familiar with the "Medical Guide for Physicians in Determining Fitness to Drive," a 1959 publication of the American Medical Association.

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