FACING THE FUTURE IN ALCOHOL AND TRAFFIC SAFETY

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SYNOPSIS

In this paper the author reports findings of a workshop held conducted in late 1981 by the Traffic Injury Foundation of Canada under the sponsorship of the Albert Alcoholism and Drug Abuse Commission to examine issues in the area of alcohol and traffic safety, with the emphasis on alternative approaches to the problem. An international group of experts identified and discussed key issues and solutions. They found no single "best" approach or type of program; rather, they agreed that a major long-term, coordinated effort is necessary for a significant impact. Given such a commitment, strategies that integrate action, evaluation, and research promise much in terms of effectiveness. Identifying the need for, and developing an outline of, a comprehensive strategic approach represents a major outcome of the symposium. The author also presents a set of recommendations for further action.

INTRODUCTION

Early in this century, against a complex background of rapid societal change, the alcohol-crash problem emerged as a distinct—though ill-defined—area of social concern (for example, see Editorial, The Quarterly Journal of Inebriety, 1904). By 1940, the gathering of anecdotal evidence had given way to the scientific study of alcohol's role in traffic accidents (Heise, 1934; Holcomb, 1938; Widmark, 1932). Well before research measured its nature and extent, however, preventive measures aimed at reducing the magnitude of the alcohol-crash problem were developed and implemented. The problem was "big" and "something had to be done about it." In fact, experimental and epidemiologic studies served primarily "to dramatize the enormity of the problem and the seriousness of its effects on a complex and fast-moving society" (Borkenstein et al., 1964, p. 144; Gusfield, 1981). Perhaps for this reason alone, research on alcohol and traffic safety has rarely displayed the careful, systematic inquiry common to other scientific ventures. As a consequence, today no one can say precisely how great a risk alcohol consumption among road users poses to health and safety, nor how much difference laws, propaganda, education, and other measures have made (Jones & Joscelyn, 1979a,b; Warren & Donelson, 1982).

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At present, we can roughly estimate the extent and costs of alcohol-crash problem (Reed, 1981). We know much about how alcohol affects human behavior, though far less about how alcohol impairs performance of the driving task (Carpenter, 1963; Levine et al., 1973; Perrine, 1974). We also know that efforts to reduce the alcohol-crash problem by deterring alcohol-impaired persons from driving have made little difference (Ross, 1981). The admonition, "If you drink, do not drive; if you drive, do not drink," has been heard, and not heeded, by a substantial portion of the driving population. Information about drinking and driving, although widely held, appears impotent in changing behavior unless married to intensive police enforcement of impaired-driving laws—which many disregard, some often.

In recent years, those responsible for studying and dealing with the alcohol-crash problem—both researchers and practitioners—have expressed a growing sense of frustration over its magnitude and its seemingly intransigent nature. Despite numerous, diverse approaches to dealing with the problem, few countermeasure programs have been demonstratively effective. Inroads have been difficult at best, and successes have been marginal, costly, and temporary. Periodic conferences, symposia, and workshops have examined the alcohol-crash problem and have issued recommendations for continued research and for the development of countermeasures. In general, these recommendations have been implemented in the form of programs with defined focus, but generally as measures already found deficient in terms of ultimate criteria: substantial, cost-effective reductions in alcohol-related traffic deaths, injuries, and other losses. This general approach has been described as "keeping the lid on the problem." Such an approach suggests a certain lack of direction and evidences a need to re-examine how best to proceed in the coming decades.

As one method to accomplish such a re-examination, the Traffic Injury Research Foundation of Canada (TIRF) brought together recognized experts in the field of alcohol and traffic safety to examine the state-of-the-art and to consider directions and priorities for the future. In this paper, I will discuss the objectives and the outcome of that workshop briefly, because they are published in detail elsewhere (Donelson, 1983) and because my primary purpose in this paper is to examine some insights gained through participation in the workshop and to present recommendations for future courses of action in the field. The views and opinions expressed in this paper are, therefore, not necessarily those of the other workshop participants.

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In retrospect, considering the results produced by the workshop, I judge that its stated objectives may be described as extremely ambitious, if not naive: to examine major issues related to the alcohol-crash problem; to identify alternative countermeasure strategies that could form a basis for long-range plans and programs; to specify critical gaps in existing information, which, if filled, could support new initiatives in the area of alcohol and traffic safety; and, in the context of the above, to ascertain priorities for the 1980's and beyond. As described below, these objectives were not fulfilled.

An orientating theme of the workshop was captured in the questions:

Are new initiatives possible for reducing alcohol-crash losses, or must past actions to deal with the problem--based on traditional and largely ineffective approaches--be continued, with efforts perhaps re-doubled?

We had hoped that this question, a reaction to the "keep-the-lid-on-the-problem" approach described above, would focus discussion during the workshop on possible alternative strategies. As a result, one could then proceed quickly to develop a general plan of blueprint quality for setting priorities in the coming decades. But, the task of examining this and other key issues became a stumbling block in itself throughout the workshop. For example, by the end of the first day, the international group of experts had not even agreed on what constituted major issues in the field, nor had they identified a discrete set of issues for further discussion. In spite of this unforeseen barrier and the attendant frustration felt by most, if not all participants, the workshop ultimately accomplished much and provided valuable insights.

To determine what the workshop did accomplish, let us begin with what it did not accomplish. First, the workshop did not produce a "solution" to the alcohol-crash problem. This unstated (and hoped for) objective lay implicit in our conduct of the workshop. After 50 years of research and 2 decades of intensive countermeasures, surely now with this workshop, the answer would emerge. It did not--at least, not in the form expected. Nonetheless, each participant gained a deeper appreciation of the nature of the problem--its diffuseness and its complexity--and how societal conditions and forces resist attempts to reduce its magnitude. That few, if any, participants went away from the workshop with "the" solution may speak highly of the proceedings.
Second, the workshop did not resolve many major issues current in the field. The resolution of issues depends upon agreement. With diverse backgrounds and strong points of view, participants found it difficult to agree on many issues. However frustrating, ensuing discussions provided a better understanding of the issues than existed before and served to underscore the continuing need for dialogue among those active in the field.

Third, the workshop did not develop in any detail alternative countermeasure strategies for long-range plans and programs. Many participants identified countermeasure approaches that they believed most promising of effective. Of particular interest was the strong support given to social/behavioral programs, a result that contrasts with past conferences on alcohol and traffic safety. Nevertheless, the panel as a whole "agreed to disagree" as to the best approach for short- and long-term efforts. Nevertheless, as discussed below, participants did reach consensus on a general strategy to reduce alcohol-crash losses.

Fourth, the workshop did not specify informational needs that, if met, would support new initiatives. As a group, participants did not even reach consensus on a basic issue: the need for more information defining the alcohol-crash problem. This lack of agreement, which surprised some participants, precluded formal listing of informational needs as such.

Fifth, the workshop did not produce a discrete set of priorities for future activities. Given the differences of opinion among participants, no effort was made to prioritize future research or countermeasure programs. Rather, the panel developed the outline of a general strategy that suggests certain actions with high priority. These are identified below.

In summary, the international group of experts did not fully achieve the stated objectives of the workshop. With hindsight, one can appreciate why. Few issues in the area of alcohol and traffic safety, upon close examination, appear easily resolved. The difficulties experienced by participants working together to develop a coherent strategic plan mirror those faced by the "alcohol-safety/health" field as a whole. Yet the workshop accomplished much by better defining key issues, outlining a general strategy required to support a more effective societal response to the alcohol-crash problem, and indicating potentially fruitful courses of action for future activity in the field.
The Anatomy of an Issue

The workshop featured very lively debates among participants, which might surprise those who expect agreement from experts having a common base of knowledge. In order to illustrate how this occurred, the following section summarizes one such discussion.

Webster's New Collegiate Dictionary offers two definitions of "issue": (a) a matter that is in dispute between 2 or more parties: a point of debate or controversy; and (b) the point at which an unsettled matter is ready for a decision. Few issues raised for discussion during the workshop conformed to Definition b. Even the carefully worded "focal issue" sparked dispute: "Are new initiatives possible for reducing alcohol-crash losses, or must past actions to deal with the problem--based on traditional and largely ineffective approaches--be continued, with efforts perhaps redoubled?" Some participants took exception to the phrase "largely ineffective," believing at least some programs and perhaps countermeasures as a whole have had a significant impact on the alcohol-crash problem. Others questioned whether "new initiatives" were even possible, given the wide range and diversity of past programs. The panel as a whole even discussed quite seriously whether "alcohol-related" traffic accidents constitute a problem worth dealing with. Far from resolving these issues, the group of experts proceeded to identify many underlying issues and questions (i.e., issues within issues).

For example, have past actions to deal with the alcohol-crash problem proved largely ineffective? In recent years, internationally respected experts have raised this question and found little evidence to support a negative answer (e.g., Ross, 1981; Zador, 1976, 1977). To assert that the problem would be "much worse" if countermeasure programs had not existed is, of course, beyond proof and hardly satisfies the question at hand. Some Canadian data indicate that the alcohol-crash and alcohol-impaired driving problems have remained about the same over the past 5 to 10 years. Warren, Simpson, and Chattaway (1980) reported that the rate of alcohol involvement in fatal traffic accidents has remained fundamentally unchanged since 1973 (about 35%).

A roadside survey conducted in Ontario in 1979 found that 6.6% of nighttime drivers had blood alcohol concentrations (BAC's) of 80 mg% or higher--essentially the same finding by the 1974 Transport Canada survey of Ontario drivers (Interministerial Committee on Drinking-Driving, 1980). Significantly, during this time period, legislation was revised to permit police to use roadside screening devices to aid in detecting drivers with illegal BAC's.
In the workshop, this discussion led to a "back-door" issue. "Does it really matter?" In other words, the alcohol-crash is "big," and "something has to be done." Who cares if the problem has increased, stayed the same, or slightly decreased? The truth of the matter remains: we cannot accept current losses due to alcohol-impaired road users. Who could not agree? To the consternation of others, some workshop participants did not. They returned to a more general issue: "Do we really have an alcohol-crash problem?" In a way, they flipped a statistical coin, citing the following: less than 5 fatal traffic accident occur for every 100 million vehicles miles travelled; less than 2 injury accidents occur for every 1 million vehicle miles travelled; the absolute risk of traffic accident given illegal BAC's appears extremely low. Although the alcohol-crash problem appears large in aggregate, the individual who drinks and drives might well worry more about the greater risk of arrest (commonly estimated at 1 in 2000 trips) than the much lesser risk of accident involvement. Statistically, a person with a BAC twice the legal limit can drive hundreds of times without expecting any adverse consequences. Moreover, as some participants observed, the magnitude of the alcohol-crash problem has been overstated both in the scientific literature and in the media. In fact, precise estimates of traffic crash losses due to alcohol impairment of road users are impossible, given available data.

The discussion summarized above illustrates the scope and complexity of issues encountered by the workshop panel. In some degree, each participant discovered that long-held, even venerable assumptions about the alcohol-crash problem were not necessarily shared by colleagues. Many issues raised for discussion remain unresolved simply because present knowledge does not provide definitive answers. As a result, the panel could not accomplish specific objectives that depended on the resolution of basic issues. To their credit, however, participants sought out and explored areas of common concern and reached consensus on several important matters.

WORKSHOP FINDINGS: A STRATEGIC PLAN

Eventually, despite some resistance, the panel of experts reaffirmed that the alcohol-crash problem persists at an intolerable level, despite long-term outlays of public funds and other resources to deal with it and that a new initiative must be developed to effect a substantial reduction in the magnitude of the problem. In other words, the problem is big and something has to be done about it.
Although these assertions might seem self-evident and hardly worth repeating, they do represent a growing realization that past efforts—including strong legal countermeasures—have failed to achieve their fundamental aims (cf., Insurance Institute for Highway Safety, 1982a,b). They also represent a willingness among those active in the field to re-examine premises underlying present policy.

The participants also reached consensus on a general approach to deal with the alcohol-crash problem in the future. Participants unanimously agreed that, given the nature of the problem, substantial reductions in its magnitude can be expected only if a major, coordinated, long-term effort is undertaken. They emphasized that this effort requires (1) an explicit, long-term commitment at all levels of government and (2) a detailed, implementable, long-range strategic plan to combine and integrate activity in the field.

At first reading, this agreement may seem too general to have much value. Expressed in the negative, however, its meaning becomes clearer. The participants acknowledge that the past efforts have not reduced alcohol-crash losses substantially. Among the many factors that have contributed to the apparent lack of progress, one stands out: the failure to address this diffuse, complex problem in a comprehensive, coordinated fashion. The panel as a whole concluded that, if continued, this state of affairs will permit the alcohol-crash problem to persist indefinitely. This conclusion has direct impact for future directions in the field. Rather than a single "best" strategy based on specific countermeasure approaches—a source of contention among experts—what seems required is a program that combines and integrates action, research, and evaluation. As the workshop panel did not address the pragmatic issue of how, in practice, to integrate and coordinate these activities, the following question becomes paramount: Can the many agencies, organizations, and individuals—which represent specialized interests, different disciplines, and separate areas of responsibility—evolve into the type of network required to develop and implement a complex, long-range strategic plan? The current, relatively unstructured approach to dealing with the alcohol-crash problem reflects, above all, the diffuseness of responsibility for it. Many government agencies and other organizations share a common concern, yet seldom communicate—and rarely coordinate their activity. To create a more structured approach will demand much from those willing and committed to achieve this goal.
These and other findings of the workshop suggest immediate actions to support the long-range goals defined by participants. The following section outlines specific recommendations developed as a result of the proceedings.

**FACING THE FUTURE**

Based on the findings of the workshop—including the experience and insights it afforded—and on past work in the field, several courses of action can be suggested. These recommendations pertain more to future directions than to specific plans or programs. What seems most needed (if not most wanted) is a careful appraisal of contextual issues—issues that permeate all areas of the field. These issues hamper resolution of less general, content-oriented issues concerning, for example, the design and conduct of research and countermeasure programs. Each of the following recommendations addresses the pragmatic issue identified above, namely, how to develop and implement a comprehensive, long-range, coordinated program that will reduce substantially the magnitude of alcohol-crash losses.

1. **Continue the Process of Strategic Planning**

   As applied in military and industrial organizations, "strategic planning" is a formal, stepwise process. Its function is to define precisely the mission or raison d'être of the enterprise; to specify clearly goals and objectives; and to develop strategies to accomplish them, taking into account external and internal factors, both present and future, that may affect the overall mission and its aims. Thus, strategic planning is a top-level function that develops plans and programs through which aims are accomplished.

   The workshop on alcohol and traffic safety did not apply strategic planning as a method to achieve its objectives, which explicitly concerned "strategies and priorities" for future activity in the field. As one important outcome of the workshop, however, participants realized the need for a strategic plan to deal effectively with the alcohol-crash problem. In fact, the workshop initiated the process itself by identifying fundamental issues that strategic planning best addresses.

   In recommending that the process of strategic planning continue, not only is the great importance of this undertaking acknowledged, but also the considerable commitment required to sustain and complete the process. As brought out in the workshop, numerous barriers to accomplishing this task exist. The "alcohol-safety/health
community," itself, may prove the greatest of these barriers. Although the members of this community ostensibly share common goals and objectives, they have not fully developed a sense of mission, much less a structure or network that could function as would an organization. Nonetheless, the process of strategic planning offers an effective means to confront and resolve basic issues that could thwart—indefinitely—the best intentions of all who share the goal of reducing alcohol-crash losses.

2. Increase Communication Among Persons, Agencies, and Organizations Active in the Field

The relationship between alcohol consumption and traffic accidents has traditionally concerned those active in the transportation sector, as the common phrase "alcohol and traffic safety" implies. In recent years, however, public health agencies have played an increasingly active role in the conduct of research and programs. Both health and safety interests draw much support and substantial resources from educational, criminal justice, and health care systems, as well as other governmental agencies such as motor vehicle and driver licensing agencies. The scope and practice of alcohol and traffic safety, therefore, are as broad as the alcohol-crash problem is diffuse. This area of social concern, however, has tended to fractionate along lines of discipline, function, and political subdivisions—if, indeed, an alcohol-safety/health community has ever actually existed. The fragmented nature of past and on-going activity in the field reflects the diffuseness of responsibility for the problem. The dearth of effective communication among the numerous, diverse interest groups seems chronic.

Given the perceived need for a combined and integrated societal response to the problem, increasing communication among key actors and principal stakeholders in the field becomes an essential prerequisite. Increased communication may lessen the discordant influence of "territorial imperatives" prevalent among researchers, practitioners, and policy makers. By enhancing the degree of mutual understanding, increased communication would facilitate the removal of barriers between governmental and nongovernmental agencies; between those who initiate and carry out programs and those who would evaluate them; between policymakers and the perennial opposition party, researchers; and between the public and private sectors. The increased exchange of information and, more importantly, ideas might also reduce redundancy in the field, which sometimes manifests the "re-invent-the-wheel" syndrome, particularly in developing countries.
"Increased communication," however, does not mean more "show-and-tell." The resolution of substantive issues will require imaginative, thoughtful discussion. A spirit of co-operation and a willingness to participate in creating the new initiative will greatly support not only the aim of effective communication, but also the (perhaps idealistic) goal of reducing alcohol-crash losses.

3. **Facilitate Inter-Agency Co-operation and Collaboration**

In general, activity in the field resembles more a competitive than a co-operative venture. Researchers vie for limited funds from agencies that offer grants and contracts. Governmental agencies jealously guard their partial mandates in the area. Many agencies (both within and without government) appear to function autonomously, as if to say, "We had rather do it all ourselves." To the degree this characterization of the field is accurate, efforts to facilitate inter-agency co-operation and collaboration should receive high priority.

The growing appreciation of the nature of the alcohol-crash problem suggests that effective action will require a complex network of multiple agencies, organizations, and individuals functioning at all levels of society. This is not to say that what is needed is a megalithic agency incorporating all functions that address all aspects of the problem. Conceiving of such an organization, much less establishing one, seems impossible, if only because it would be necessary to restructure our social system in the name of dealing with the alcohol-crash problem. As an alternative, however, one can encourage working together as a general approach to the problem, deepening the commitment to seek out and establish co-operative arrangements, and dedicating the efforts as parts in service to the whole.

4. **Re-examine Premises Concerning the Nature of—and Responsibility for—the Alcohol-Crash Problem**

The closer one examines the complex field of alcohol and traffic safety the more it becomes necessary to re-examine certain premises underlying formulations and conceptions of the alcohol-crash problem and its antecedent, alcohol-impaired driving. For example, in the past, many have painted a picture of the drinking driver as the "killer drunk:" the excessively impaired, morally reprehensible criminal who, with reckless and wanton disregard for the lives and safety of others, wreaks havoc, mayhem, and carnage on the highways. This image certainly fits at least some. Nevertheless, this description, similar
to those once again frequently found in the media, seems mostly myth. As Gusfield (1981) observed, such simplistic images serve authorities well in rallying support for legal approaches to deal with the alcohol-problem. Unfortunately, they also serve to obscure the reality of drinking-driving, which if we study the results of roadside surveys, involves no one identifiable subgroup in the population at risk. Perhaps, in the wise words of Walt Kelly's Pogo, "We have met the enemy and he is us."

In recognizing that the alcohol-crash problem arises from the complex interplay of two integral, social activities—the use of motor vehicles and the consumption of alcoholic beverages—we must re-examine how the problem has been handled in the past. Basically, the problem has been treated as discrete and well-defined. "Alcohol causes traffic accidents." "Alcoholics and problem drinkers cause traffic accidents." Such statements lend themselves to sharp qualification, if not outright contradiction. For instance, "alcohol is neither a necessary nor a sufficient precondition for the occurrence of accidents" (Simpson & Warren, 1981; p. 189). Persons who consume relatively large volumes of alcoholic beverages may or may not conform to existing definitions of "alcoholic" or "problem drinkers." They may also be so-called "social drinkers" who had "a few too many." Moreover, based on the results of a 6½-year study that analyzed the driving records of 1,247 hospitalized alcoholics, Filkins (1971) warned against the "dangerous... conclusion that all alcoholic drivers are automatically unsafe drivers" (p. 6). Similar debates surround the reliability and validity of BAs as a measure of driver impairment and of the magnitude of the alcohol-crash problem (see Warren & Donelson, 1982). Researchers who call into question simplifying assumptions, which some may consider sacrosanct, might well be perceived as "ivory-tower" types. Yet, a bare fact remains: many countermeasure programs, founded on apparently inaccurate assumptions about the nature of the problem, have produced poor results given their cost. In light of past experience, to engage yet another cycle of large-scale "drunk driving crackdowns"—which may mean hauling in large number of moderate, responsible drinking-drivers—seems thoughtless, pointless, and wasteful. More people (policymakers, practitioners, and researchers) are needed who can devote time and energy to thinking about the problem, its nature, and how we as a society can best respond to it.

Above all, the time has come to re-consider the issue of responsibility for the alcohol-crash problem. One view assigns full responsibility to the alcohol-impaired driver or pedestrian but for whose behavior a traffic accident
would not have happened. At one level, this view has great validity. Another view might take into account that we live in a society that encourages the consumption of alcohol and almost demands the use of motor vehicles. This society also structures itself to bring the two into combination. From this perspective, the impaired driver can appear as victim (Warren & Donelson, 1982; pp. 191-197). Somewhere between the alcohol-impaired driver as "the criminal" and the alcohol-impaired driver as "the victim" may lie a simple truth complicated by our present way of thinking about the problem. A glimpse of this truth suggests that all of us are part of the problem and, therefore, can all take personal and individual responsibility for it. This taking of responsibility, as well as the making of a commitment to participate in reducing alcohol-crash losses, are preconditions for a major, long-term, coordinated effort. To blame others while absolving ourselves cannot hide what appears as stark reality: we as a society of individuals have created the problem. If we do not take responsibility for resolving it, who will? After all, we have learned one lesson offered by the alcohol-traffic safety experience: the alcohol-crash problem will not disappear on its own.

REFERENCES


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