1998

Scudder Oration on Trauma:

In search of a voice

by
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The concept I will present in this article is not new. It has been addressed by several previous Scudder orators. The assumptions underlying this concept go something like this: Major public health problems benefit from the support of lay advocacy groups; trauma is a major public health problem; therefore, trauma needs an effective lay advocacy group or groups.

Are these assumptions valid? Let's look at them one at a time.

Making a difference

The first assumption is that lay advocacy groups can, and do, influence societal responses to public health problems. This influence occurs in a number of ways. First, and probably most important, an advocacy group serves as a voice to increase public awareness of the problem at hand, to expand public education about the problem at hand, and to generate political and economic support. This kind of activity results in programs that support scientific investigation, enhance patient care, and stimulate prevention efforts. Finally, the most effective lay advocacy groups can be identified by their extensive collaborative networks.

Consider some examples. The organizations listed in Table 1 on this page address problems that have an impact on the health of our nation. They have a variety of origins. The March of Dimes was established by President Franklin Roosevelt to address polio, and the Susan B. Komen foundation started from one person's concern over her sister's battle with breast cancer.

Using the American Cancer Society as an example, I will try to illustrate what I mean by an issue having a "voice" and will look at the programs and collaborative efforts that can result from such representation.

There is no question that the American Cancer Society has had a major impact on public education. Examples of this group's successful educational programs include the Seven Signs of Cancer, the way our society now views cigarette smoking, and the current multipronged approach to mammography and breast cancer detection and treatment.

The programs in research and patient care conducted under the aegis of the American Cancer Society are wide ranging. Notable in terms of its impact on patient care is the *Journal of Cancer*, which is provided to practicing physicians and other health care practitioners.

Table 1

Advocacy groups

American Cancer Society
March of Dimes
American Heart Association
Susan B. Komen Foundation
American Diabetes Association
United Cerebral Palsy

The collaborative efforts of the American Cancer Society are numerous. One notable example is the fact that in 1959, the American Cancer Society, along with the American College of Surgeons, was instrumental in establishing the American Joint Committee on Cancer (AJCC). The AJCC consists of six founding organizations, four sponsoring organizations, and seven liaison organizations. The four sponsoring organizations are the American College of Surgeons, the American Cancer Society, the American Society of Clinical Oncology, and the Centers for Disease Control and Prevention.

Thus, I believe we can support the assumption that there are advocacy groups that have a major impact on public health problems. These advocacy groups are supported by physicians, but depend upon the leadership and participation of laypersons.

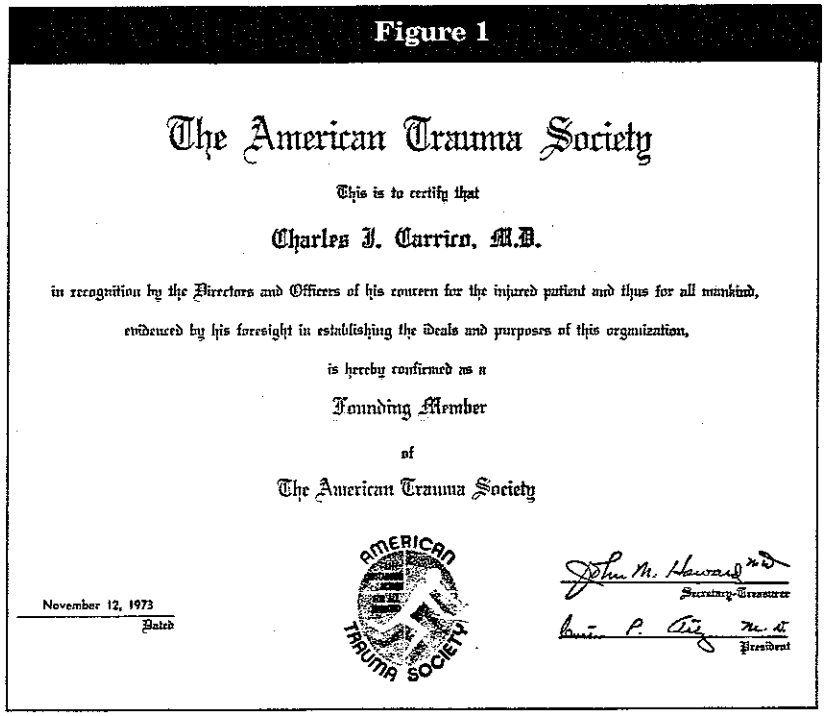
A major problem

The second assumption is that trauma is a major public health problem. I doubt that anyone in the surgical/medical community disagrees with that statement. The data are unarguable. Annually, there are 70 million reported injuries, resulting in 150,000 deaths, and 11 million temporary and half a million permanent disabilities. The annual direct and indirect costs that result from these injuries are estimated to be from $180 to $400

billion. This concept has been recognized by venerable national bodies, including the National Research Council of the National Academy of Sciences in its 1966 publication, *Accidental Death and Disability—The Neglected Disease of Modern Society* and a study conducted two decades later. This second study was conducted under the umbrella of the National Research Council and the Institute of Medicine and was published as *Injury in America: A Continuing Public Health Problem.*

It follows that since trauma is a national public health problem and since advocacy groups with major lay involvement have been shown to be effective, there should be a group that provides a voice, an effective voice, for the prevention of injuries and treatment of injured patients. As I said previously, this is not an original concept.

Figure 1


The American Trauma Society

This is to certify that

Charles J. Carrico, M.D.

in recognition by the Directors and Officers of his concern for the injured patient and thus for all mankind,

evidenced by his foresight in establishing the ideals and purposes of this organization,

is hereby confirmed as a

Founding Member

of

The American Trauma Society

November 12, 1973
Dated

AMERICAN TRAUMA SOCIETY

John M. Howard M.D.
Secretary-Treasurer

President

In his 1967 Scudder Oration titled, "The College and the accident victim," James Stack pointed out the need for an organized approach to injury and injury prevention and referred to the Joint Action Program that was being established at the time by the American Association for the Surgery of Trauma, the National Safety Council, and the American College of Surgeons. Howard Pile, then president of the National Safety Council, "commended the surgeons for their concern and the groups for the important roles they are playing in the interlocking problems of prevention and restoration."

The American Trauma Society (ATS) was incorporated in 1968—30 years ago—with the following statement of purpose: "To foster the areas of medical science, education and training relating to trauma; the prevention of trauma; and the improvement of the treatment of persons suffering from trauma."

In his Scudder Oration in 1970, William Fitts referred to the need for professional and lay cooperation and indicated that the American Trauma Society "has been slow to get off the ground, not from any lack of support by professional organizations or (lack of) enthusiasm by its organizers, but because of the difficulty in interesting laymen to serve as lay members of the board of directors. Yet the layman has so much to gain from taking an active interest in trauma."

The struggles the American Trauma Society had getting off the ground are illustrated in the certificate depicted in Figure 1 above. It shows that when I joined the ATS in 1973 (five years after its incorporation), the society was still recruiting founding members. By 1976 there were 3,250 founding members, the vast majority of whom were MDs and RNs.

In their Scudder Orations, Drs. Donald Gann, Donald Trunkey, and Erwin Thal addressed the public health aspects of the trauma problem. Dr. Thal talked about apathy. Although his primary emphasis was on the surgical profession, he alluded to the lack of public awareness about trauma. In reporting results of data he had gathered, he said: "Trauma still does not have a high priority when compared with other health prob-

lems. Thirty-five percent of the public and 42 percent of the business executives surveyed could not give a correct definition of the term trauma ... The American Trauma Society needs our support in this area; a highly visible national spokesperson (for trauma) is sorely needed."

Do we have a strong voice?

So the question to be addressed today is whether there is an effective, widely recognized, national voice for trauma. To answer that question, we need to know the status of national advocacy efforts. We need some information about the focused advocacy groups and their efforts and, most of all, we need to know about the societal impact of trauma advocacy efforts in general. Many people have speculated on these issues and have provided opinions and suggestions.

What follows now are some data that may clarify some of these issues. I apologize in advance if anyone takes umbrage at the data presented or the conclusions reached, but I assure you that I present this material in the spirit of improving our effectiveness. The data were obtained by Grant O'Keefe, MD, assistant professor of surgery at the University of Texas Southwestern Medical Center in Dallas, with the assistance of the Survey Research Center of the University of North Texas, and resulted from telephone interviews with 400 randomly selected individuals. A different set of questions was addressed to 20 lay advocacy groups.

The findings regarding public awareness are probably not surprising. Of the 400 people questioned, 95 percent had heard of the American Cancer Society, and half of those individuals had made donations to the Cancer Society. A similar number of interviewees were aware of the American Heart Association, and roughly 60 percent had made donations to that group. In contrast, only 17 percent had heard of the American Trauma Society, and only 3 percent had made donations. This financial support fits the interviewees' perceptions of cancer, heart disease, and trauma as being major health priorities for the United States: 50 percent of these individuals perceived cancer as a major health priority and roughly 20 percent viewed heart disease in that light—but only 3 percent regarded trauma as being a major public health problem.

Another measure of public awareness was obtained by asking what the individual thought the average American was likely to die from and whether he or she knew someone who had died from the same causes. The data in Table 2 on page 17

Table 2

Public awareness

	Average American	Know someone	Public priority	Actual # 1994
Cancer	48%	86%	48%	24%
Heart disease	33	81	18	32
Injury	12	61	3	7
AIDS	—	~20	24	2

Table 3

Public interest groups

AAA (Foundation for Safety)
AAAM (Am. Assn. for Auto. Med.)
ACTS (Am. Coal. for Trauma Care)
APHA (Am. Public Health Assn.)
ATS (Am. Trauma Society)
Bicycle Safety Institute
Brain Injury Association
Center for Advanced Study for Public Health
CDC (Center for Injury Prevention & Control)
Drunk Busters
Family Violence Prevention Fund
Harborview Injury Prev. Research Center
Insurance Institute for Highway Safety
MADD
MIEMS
National Program for Playground Safety
National Safe Kids Campaign
National Safety Council
National Spinal Cord Injury Association
NHTSA
State & Territorial Injury Prevention
(Numerous others)

17 compare those answers with the actual percentage of deaths in 1994 resulting from cancer, heart disease, or trauma. There is surprisingly little linkage between the actual personal experience and an individual's perceptions. Particularly interesting is the rating of the public priority of AIDS at 24 percent compared with the actual percent of all deaths in this country in 1994 that were AIDS-related—42,000 out of approximately 2.3 million, or 2 percent.

It is clear that public perceptions do not match the facts regarding trauma. The voice we've tried to develop has not achieved the hoped-for success.

The information in Table 3 on page 17 illustrates some of the large number of focused public interest groups that address various aspects of trauma advocacy, care, and prevention. Twenty of these groups agreed to talk to our interviewers and provided us with some further data regarding the effectiveness of our voice.

Of the 20 groups that were interviewed, only nine indicated that they were aware of a national agency whose purpose was to serve as a spokesperson for injury in general. Even more distressing is the fact that only three of those groups could name the American Trauma Society. Admittedly, 20 is a relatively small sample, but still—three out of 20 is a distressing result.

The answer to our question as to whether there is a widely recognized national voice for trauma in this country, then, is a distressing "no." In light of that finding, I believe the question we now need to address is, "What can we do to improve our voice?"

Table 4

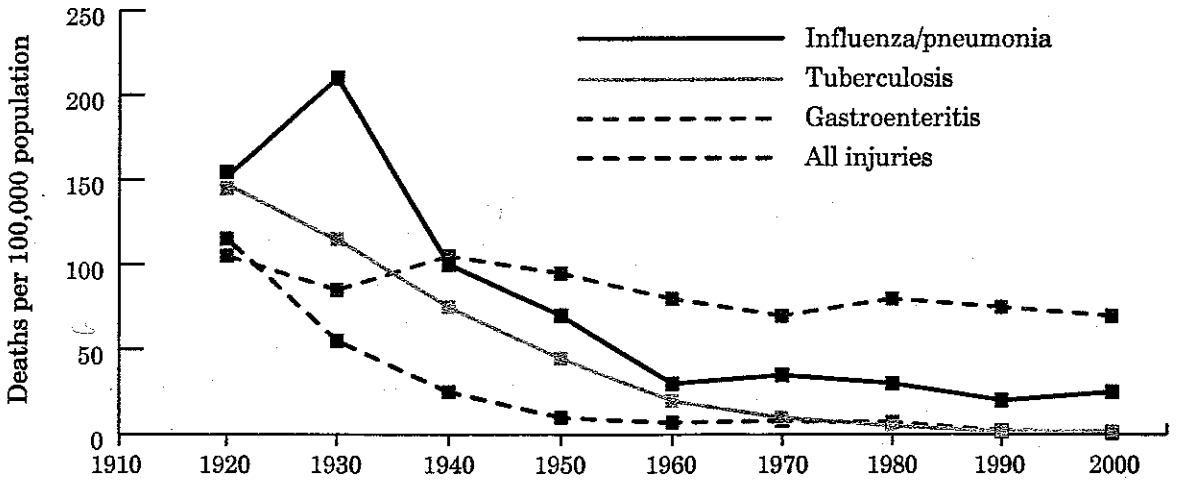
Death rates

	1993	1979-1993 (%)
Unintentional	30.3	29
MVC	16.0	31
Other	14.3	27
Intentional injury		
Suicide	11.3	3.4
Homicide	10.9	4.9

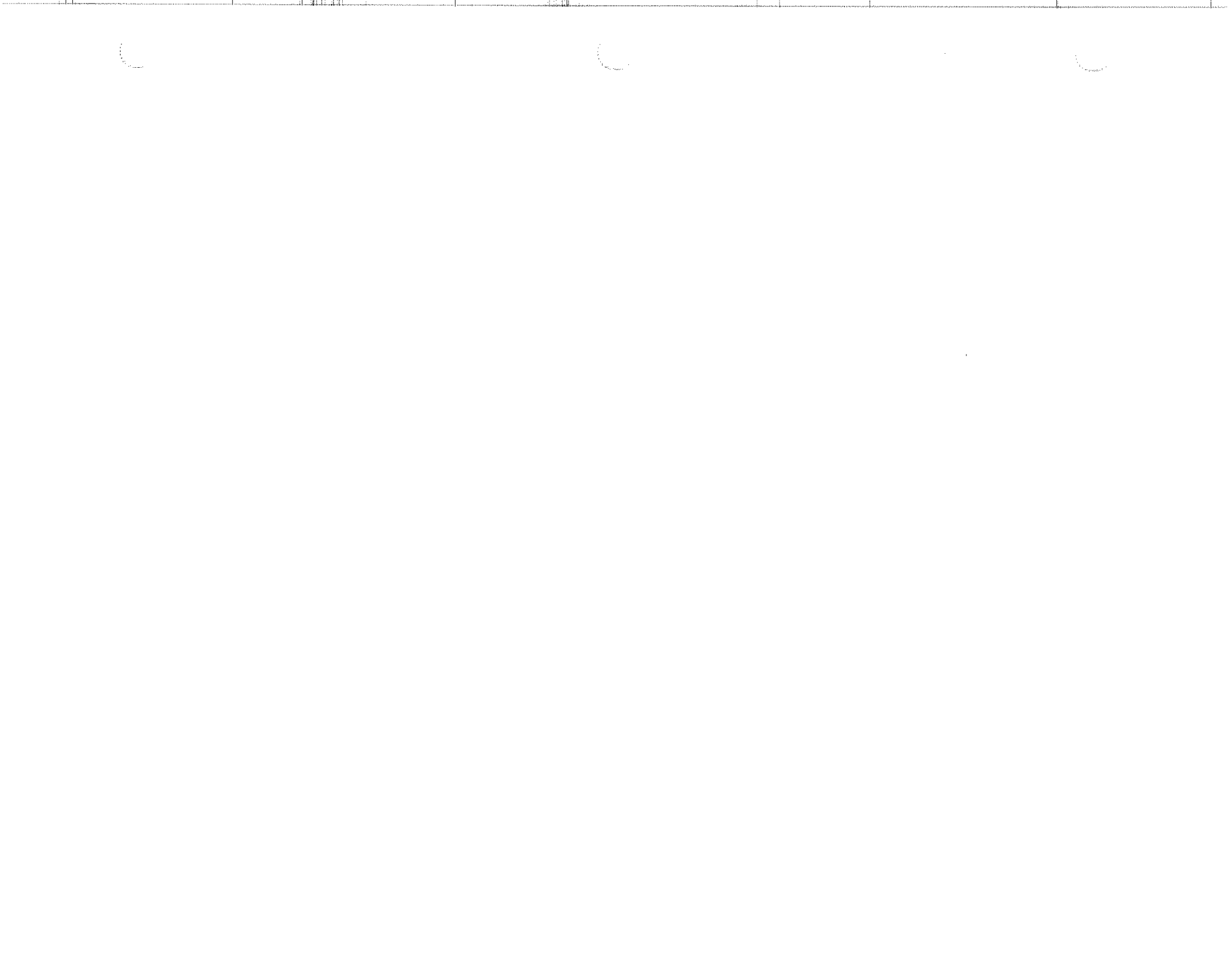
Source: *MMWR*, 45:8, March 1, 1996.

Figure 2

Death rates from injuries and infectious diseases by year, 1910-1994



Modified from Baker SP, et al: *The Injury Fact Book*, Lexington, MA: DC Heath & Co., 1984. 1994 data from *Accident Facts* and U.S. Census Bureau.



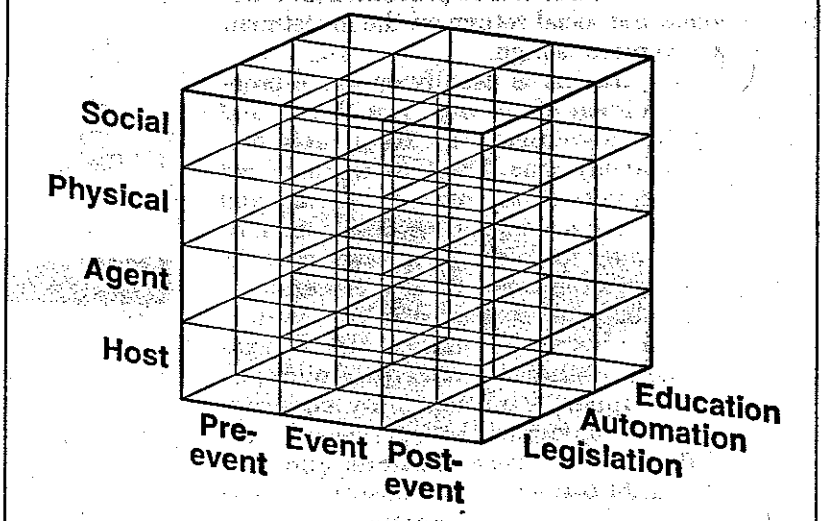
What can be done?

Several courses of action are available. We could continue to whine, wonder why we don't have a stronger voice, and blame each other. We could maintain that we are doing a good enough job as it is—we "just need to be more patient and things will fall into place." We could propose the formation of a new national organization, or we could evaluate the potential for enhancing communication and collaboration among the existing groups.

Whine, wonder why, and blame. I'm afraid that's what many of us have been doing, and the end result is that we have no plan. If we have no plan, we should listen to the predictions of elegant philosophers like Montaigne, who observed in the 1500s, "No wind blows in favor of a ship that has no port of destination," and to less elegant philosophers like Casey Stengel, who said, "If you don't know where you want to go—you will probably get there!" As a matter of fact, if we don't have a clear plan for where we're going, we probably will get nowhere.

Figure 3

36 ways to address public health problems



Why can't we simply continue on as is? Maybe we are doing all right and just don't know it. Again, let's look at some data. Table 4 on page 18 contains data from the *Morbidity and Mortality Weekly Report* published by the Centers for Disease Control and Prevention and provides us with some encouraging data as we compare the statistics for the 14-year period from 1979 to 1993. We see a 31 percent decrease in death rates from unintentional injuries, most notably from motor vehicle crashes. However, the change in intentional injuries is much less encouraging. Nevertheless, things are changing favorably, so maybe we can simply relax and wait.

When we look over the data from the past few years, we see that the decrease in deaths from all injuries has leveled off. The total remains at 150,000 deaths per year. Furthermore, when we compare the change in death rate from injuries with other public health problems, such as tuberculosis and childhood gastroenteritis (Figure 2, p. 18), we see only a slight fall in deaths from trauma compared with major changes in, and near elimination of, other public health problems. Clearly, it would be inadequate for us to continue on as is.

How about establishing a new national organization for trauma? Maybe the American Trauma Society just "hasn't been doing it right" for the past 30 years. At the risk of using an overly simplistic analogy, remember that a sailboat gets to where it is as a result of a number of different forces, including the wind, tides, currents, set of the sails, hand on the rudder, and the accuracy of the guidance systems. It's a mistake to assume that all that is needed at this point in time is a different hand on the rudder.

A problem of perception

We know that one of the problems we are dealing with is perceptions about trauma. The most successful groups have addressed diseases that are chronic, that are perceived by the public as having a high probability cause of their own personal

illness, and that generally occur in older, well-known figures (and usually via the media we're made aware of these individuals' valiant battles against their diseases). There is a public perception that these diseases can be prevented and that the economic and social return on the investment made in prevention is high.

In contrast, trauma is usually an acute problem. The perception of personal risk is low, and our patients are younger and frequently less known, if not anonymous. These perceptions and other misperceptions about injury prevention and the cost-effectiveness of injury prevention must be overcome. In order to do that, the support of the focused advocacy groups is crucially important.

The 20 public interest groups interviewed by the study center at the University of North Texas provided some interesting answers to the question, "Would you support a national lay advocacy group?" Only a quarter of the interviewees said "yes." Fifty percent were cautious and said "maybe," and 20 percent were "unsure" at best (basically they said "no"). No wonder the American Trauma Society has not been more successful! And, unfortunately, there is no supportable reason to expect that a new national advocacy organization would have any greater success.

One main coordinator?

What, then, about coordination of efforts? There are many reasons to consider such an approach. For one thing, coordinating efforts would allow us to build on our strengths, combine our experience and expertise, magnify our individual impact, and also allow the potential for preserving the autonomy of the individual groups.

How would such an organization work? I propose that participation must be voluntary and must be open to a wide variety of interested groups. The coordinator should build on existing collaborations, focus on what is practical and what will produce results, and above all must be even-handed.

All of those factors are important, but I would argue that in order to get results one of the most important considerations is the need to focus on what is practical. Let's consider an example from the death rate data we looked at previously.

The successes have been in the area of unintentional injuries, where the death rate decreased 31 percent from 1979 to 1993. Major improvements were seen in death rates resulting from automobile, bicycle, and home injuries. Let's focus on auto injuries and consider the approaches that have led to improvements.

Table 5

Motor vehicle injuries: What's changed

Highways: Barriers, surface, design
Restraints: Seat belts, car seats, air bags
Vehicle: ABS, chassis, steering column
Driver: ETOH (use, testing), awareness
Caregivers: PTLS, ATLS, hospital verification

Table 6

Haddon's matrix

Host/ human	Agent	Physical environment	Socioeconomic environment
Pre-crash phase			
Crash phase			
Post-crash phase			

Table 7

Motor vehicle injuries: Who's involved

NHTSA	AAA
MADD	ATS
DOT'S	ACS/COT
Auto industry	AAAM
Safe Kids	ACEP
National Safety Council	CDC

Let's look at what, how, and who. First, what has changed? (See Table 5, p. 20.) We have safer highways, more effective body restraints, and vehicles that are easier to control and that afford us greater protection. We have improved care and the caregivers and even have had an effect on ourselves (the drivers).

We have used a variety of available approaches. We have used all of Haddon's matrix (see Table 6, p. 20). We have addressed the physical environment, the social environment, the agent (the vehicle), and the host (the driver). We have improved highways in an effort to decrease the number of traumatic events. Safety restraints and better vehicle design protect the occupants of an automobile during a crash, and improved trauma care has decreased death and disability following the event. So, we have used education, legislation, and automation.

Who has been involved? I'm sure the list in Table 7 on page 20 is incomplete, but the numerous participants range from private to government. Without the contributions of any one of these groups, the overall impact would have been less significant.

And the efforts haven't stopped. The "buckle-up" campaign is one important example. Air bags will be made safer, highways will continue to be improved, and more lives will be saved.

A practical approach

Let's go back just a minute and review a crucial point. In his matrix, Dr. Haddon gave us 12 possible ways to approach a public health problem. Try to modify the host, agent, and physical and

Figure 4

Automobile injuries

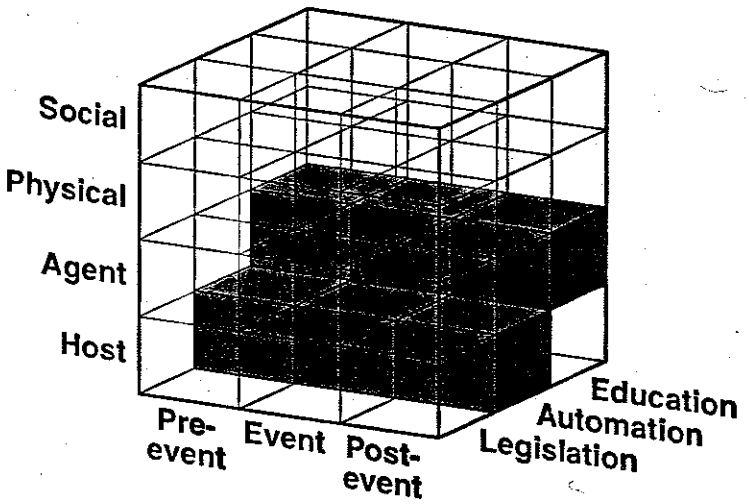
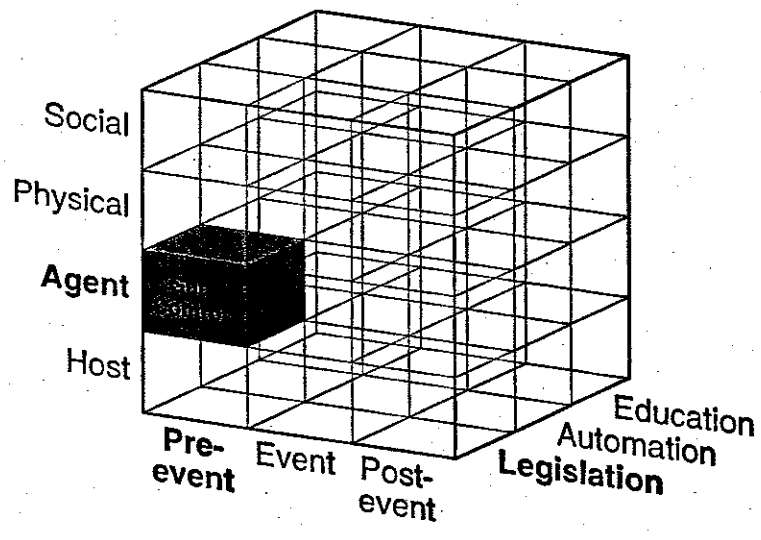


Figure 5

Firearms



social environments. Direct interventions at the pre-event phase, during the event itself, and at the post-event phase.

When we add up the potential intervention mechanisms of automation, legislation, and education, we have 36 ways to address a public health problem (see Figure 3, p. 19). In addressing automobile injuries, we've used nearly all of those 36 boxes (see Figure 4, p. 21). We do not yet know how to educate the car or automate the driver, but we have used all of the 30 other avenues. This is a practical approach—find things that will work, use all available resources, monitor the results—and you will make a significant impact.

Now let's look at what hasn't worked. The death rate from intentional injuries has not changed substantially in the last 14 years. Firearm injuries resulted in nearly 37,000 deaths in 1994. What has limited our impact? Let's look at firearm injuries. Specifically, let's look at gun control.

Gun control focuses on only one of the 36 boxes in Figure 5 on page 21—pre-event, agent, legislation. We cannot depend on any single approach. We must address firearm injuries on a much broader front. To do that, we need the collective wisdom of a large number of participants, including members of the National Rifle Association.

So, in order for coordination to work, it should be voluntary, it should be open, it should focus on the practical, it should produce demonstrable results, it should be even-handed, and, I would propose, it should be built on existing collaborations. For instance, there are active cooperative efforts between the prevention committee of the American Association for the Surgery of Trauma and the Brain Injury Association to develop injury-prevention fellowships. There is the long-standing cooperation between the AAST, the National Safety Council, and the ACS Committee on Trauma(COT). There is the potential for cooperation with the Joint Commission on Accreditation of Healthcare Organizations regarding the trauma verification program.

The next question is, "If an effort at coordination is offered, will anybody participate?" And, again, I think we have some data to suggest that they will. While the 20 advocacy groups that we talked to seemed reluctant to support a new national organization, their response to questions regarding collaborating with other organizations was almost the opposite. Eighteen indicated they would work with an "umbrella" organization and 80 percent said they would participate in joint meetings. Nobody knows until you try, but clearly the potential willingness exists, if the coordinating entity offers an attractive relationship.

Who should assume the role?

Who could coordinate these efforts? Who should offer to coordinate them? I would challenge the COT to fill this role. I believe this group has the national network, the credibility, the ability, and the energy to provide this leadership.

But, there are some essentials that are required of a leader. First, a leader has to listen—a leader cannot be the *geheimrat*. Second, a leader has to be available and conciliatory. Third, a leader has to be even-handed and that means being able to share or even give up turf, control, and the credit. As an example, a cooperative effort with the Joint Commission on Accreditation of Healthcare Organizations is being considered. In developing this joint program, the COT has the opportunity to demonstrate its ability to take an even-handed approach and share the control and the credit. The questions is, is the COT up to the challenge?

So, in summary, trauma needs a voice. So far, our voice has not been effective enough. The groups addressing the various aspects of injury need, and apparently would accept, an even-handed, credible, coordinator of efforts. Again, I believe the Committee on Trauma of the American College of Surgeons could assume that role, and I challenge the COT to accept it. Ω

continued on page 41

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