1992

OUT OF APATHY

Webster's dictionary defines apathy as a "lack of feeling or emotion, impassiveness, lack of interest or concern; indifference." Unfortunately, apathy is associated with many aspects of trauma care.

I must tell you how honored and awestruck I was when I received the invitation to deliver this, the 30th Scudder Oration on Trauma, to my colleagues at the Clinical Congress. As I perused the list of previous orators my attention was quickly directed to 1972, when my chief and good friend Dr. G. Tom Shires delivered his oration. In his opening remarks he asked "Why me?", and I would ask that same question today as there are so many of my colleagues who are far more deserving. There is no greater honor than to be recognized by one's peers, and for that I am and will be forever grateful.

Few people may remember the exact date, but on August 7, 1860, Charles Locke Scudder was born in Kent, CT. That date served as the beginning of a long and productive life that

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would extend over 89 years. During his distinguished career, Dr. Scudder wrote over 125 scientific papers addressing a variety of problems in urology, neurosurgery, gynecology, abdominal, and orthopaedic surgery. His chief interest was in fractures and dislocations, a subject that resulted in a text first published in 1900 that had 11 editions, the last of which was in 1938.

In April of 1922, 26 surgeons met at the Massachusetts General Hospital to reach an agreement regarding the treatment of fractures. Dr. Scudder was the prime mover, and in August of that year, he appeared before the Regents of the College to present the problem of traumatic surgery and fractures in particular. He lamented the fact that the treatment of broken bones was deplorable and that following fracture treatment a large number of malpractice suits had been filed, which he believed was a disgrace to the profession. The Board of Regents asked him to chair a Committee on the Treatment of Fractures that subsequently developed standards for hospital care and were approved by the Regents in 1924. The first Oration on Fractures was delivered by Dr. Scudder at the Clinical Congress in 1929.

It was fitting that Dr. Edwin French Cave, a consulting orthopaedic surgeon at the Massachusetts General Hospital, and the fifth to succeed Dr. Scudder as director of its fracture clinic, delivered the first Scudder Oration on Trauma in 1963, "Trauma, Specialism, and the College."[1–3]

Many different topics have been addressed over the years. The early subjects were limited to orthopaedics, but more recently the speakers have dealt with all aspects of trauma, ranging from basic research to philosophical and political topics.

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In 1966, the often quoted monograph *Accidental Death and Disability—The Neglected Disease of Modern Society* was published.[4] Much progress has been made since 1966. Accidental death rates peaked in the late 1960s, but, according to the latest report of the National Safety Council, rates are now at the lowest level since 1924.[5] Total deaths from motor vehicle crashes fell 23 percent in the past decade and 7 percent in the last year. This statistic compares favorably with other health problems, as deaths due to heart disease decreased by only 6.9 percent and cancer deaths increased 8.5 percent during a similar period of time.

Prehospital care has improved and trauma centers have been developed. Basic research continues to unfold new secrets, and technology has allowed us to render state-of-the-art care. Slowly but surely an awareness of trauma and what it means to our society is becoming a reality.

Ten years ago, Dr. Donald Trunkey, in his presidential address to the Society of University Surgeons, noted that of the 993 applications to the American Board of Surgery in 1980, 18 percent of all residents saw fewer than 10 trauma cases, and 47 percent saw fewer than 20 during their entire residency.[6]

Data provided by the Residency Review Committee for Surgery in 1991 indicated that there had been a marked improvement. Of 1,015 residents representing 278 programs, 90 percent performed major trauma operations on at least 30 patients, and 50 percent performed at least 72 procedures during their residency. Of the total operative experience, 8.6 percent involved trauma cases, which is an increase of 72 percent over the past decade. This finding is even more impressive as it occurred during a period when more patients were being managed nonoperatively. One has to wonder if this increased operative experience and exposure to the injured patient has had a positive or negative effect in motivating young surgeons to pursue a career in trauma.

J. David Richardson and Frank Miller addressed this question in a paper presented at last year's American Association for the Surgery of Trauma meeting in Philadelphia, PA.[7] Eight hundred and eighty-six advanced-level general surgery residents responded to a questionnaire about their interest in providing trauma care upon completion of their training. Ninety-three percent of the respondents felt that their training was sufficient to allow them to independently

care for injured patients. Two-thirds stated that trauma was a rewarding field, but only 18 percent wanted it as a career or as a major part of their practice. This total may sound discouraging, but on the contrary, nearly 20 percent saw it as an attractive career, and four out of five residents would be interested in taking care of these patients.

Primary reasons for the negative feelings the residents expressed included the large amount of nonoperative care rendered in treating blunt trauma patients and the unsavory type of patients encountered with most penetrating injuries. Lifestyle issues and economic factors were important but not considered significant.

One of the most disturbing areas cited in the survey was the negative impact of trauma surgeons as role models. The trauma attending physician was described as recently trained, interested in critical care, and reluctant to operate. His or her practice was believed to be limited to trauma to the exclusion of other general surgery patients. It was interesting to note that there was little difference between the responses from residents training in academic or private institutions.

Positive role models are an essential ingredient in the growth and development of young individuals, regardless of their field of endeavor. How well I remember my three heroes, whose influence helped mold my thought processes, goals, and aspirations. First, there was a controversial football coach, Woody Hayes, whose example of intensity and hard work laid the foundation for the compulsive attention to detail so necessary in a surgical career. Behind that gruff facade was a man of intense compassion with an insatiable thirst for education. My second role model had similar traits, but channeled them in a different direction. He was one of the true giants in our profession, the late Dr. Robert Zollinger. How well I remember the excitement of working in his laboratory and being exposed to his enthusiasm and flair for knowledge. As a clinician, he demonstrated great respect for his patients and their problems. My third hero, also a giant among giants, was my chief, Dr. G. Tom Shires. Dr. Shires' talents and accomplishments are legendary and represent the complete person: the compassionate physician who is never rushed and who is equally comfortable at the Surgical Forum, as the teacher in the classroom, as the administrator of multimillion dollar budgets, and most importantly, as the masterful technician in the operating room. You will find no apathy in this group of heroes. Their zest and enthusiasm were contagious and made them positive role models, something that may be lacking in some of our training programs today.

In part, we may be responsible for this problem. As we concentrate our attention on the development of trauma systems and a new area of critical care, we may be in the process of further fragmenting general surgery. The magnitude and geographic extent of trauma are too great to be solely managed by superspecialists. Although it is important that we develop the expertise needed and foster the development of students interested in devoting their careers to the care of the injured, we must be careful not to turn off or disenfranchise ourselves from our general surgical colleagues. It is essential that the care of the trauma patient remain within the confines of general surgery and that trauma surgeons not be viewed as second-class citizens or be restricted from performing nontrauma procedures if they so choose.

Tom Esposito and his colleagues, in the recently published article, "Why surgeons prefer not to care for trauma patients," describe some of the negative aspects of trauma care.[8] The authors report on the results of a survey sent to members of the Washington Chapter of the College that solicited the opinions of general surgeons and surgical specialists on trauma care issues.

Of the 423 responses that were analyzed, 39 percent preferred not to treat trauma patients. These surgeons tended to be older, practiced in an urban setting, and believed that trauma call had a negative impact on their elective practice. Furthermore, they indicated that trauma pa-

tients required a greater time commitment and posed a greater medicolegal risk. Reimbursement issues and location of practice were less influential factors.

This timely article addresses a significant problem, and raises the question: "Who is going to take care of our injured patients in the future?" The findings of Esposito and colleagues suggest that a significant negative attitude toward trauma patients and a preference not to treat them exists among a sizable number of surgeons.

Many communities are struggling with an increased amount of trauma and its multitude of associated problems. My own community in Dallas, TX, is no exception. We are currently in the early stage of developing a long-term trauma plan for the county. This idea was prompted in 1991 when two of the three major trauma hospitals threatened to stop taking care of trauma patients.

A physician questionnaire was designed by the Dallas County Trauma Plan Development Committee to identify the expectations and perceptions of the practicing surgeons in Dallas County. Of the 354 questionnaires sent out, 157 were returned for a response rate of 44 percent. Eighty percent of the physicians treat trauma victims, but only 20 percent expressed a preference for doing so. Sixty-six percent were concerned about the increasing volume of patients, but a disturbing 34 percent considered resigning from their hospitals because of the hospital on-call policies. Less than half of the respondents saw a role for themselves in a regional trauma plan and only 10 percent believed providing trauma care was financially beneficial.

Concerned about the public perception of trauma and stimulated by these various surveys, I decided to send out two basic questionnaires seeking opinions on a number of trauma issues. The first survey was sent to over 5,000 Fellows of the College who were randomly selected and represented both general surgery and the surgical specialties. The second survey was sent to three public sector groups. The first group was of politicians, including the 535 members of the U.S. Congress and the governors of all 50 states. The second group represented the business community and was composed of the chief executive officers of Fortune 500 companies. The third group to receive the survey was a sample of nearly 5,000 people in the general public, who were randomly selected by telephone number and zip code from throughout the country. This group was selected with full knowledge of all of the shortcomings of public opinion polls, including the sample bias, response rates, questionnaire design, and group differences between the respondents and nonrespondents.

Whereas Esposito's Washington survey and the Dallas County survey yielded relatively good response rates, my lack of results indicated apathy, perhaps representing part of the problem for which we are seeking solutions. A total of 5,026 questionnaires were sent to the Fellows, and 29 percent responded. The public received 5,638 questionnaires and, even more disappointing, only 20 percent of the CEOs, 6 percent of the politicians, and 3.7 percent of the general public responded. Of the politicians, the governors had a better response rate at 20 percent than the House at 6.6 percent or the Senate at 4.0 percent.

Fifty-five percent of the Fellows who responded were general surgeons, 5 percent were orthopaedic surgeons, and 3 percent were neurosurgeons. This breakdown was almost identical to Esposito's study. One-third of the Fellows practiced in an area with a population of less than 150,000.

Approximately three-fourths of the over 1,400 respondents take call with virtually no difference between the three groups except that a higher percentage (95%) of the neurosurgeons take call. Of those who take call, three-fourths stated that it was required; however, 60 percent of the general surgeons and 48 percent of the orthopaedic and neurosurgeons stated they would take call even if it were not required. Slightly more than 50 percent of all surgeons and over 80 percent of the neurosurgeons take call more than five days a month.

One-fourth of the group preferred not to take care of trauma patients (this number included 15 percent of those who take call). There was little difference between the responses of those who practiced in an urban versus those who practiced in a rural community.

Typical of some of the comments I received about trauma care were:

• A vascular surgeon from Ohio said, "It is a necessary inconvenience."

• A urologist from South Dakota said he believes "it is a duty (a miserable one)."

• A general surgeon from Georgia said that "all general surgeons have an obligation to assist in the care of trauma victims and maintain their competency in trauma care."

• A general surgeon in Virginia said that trauma care "continues to be a drain on human resources as well as a financial drain....I see physician fatigue and public indifference."

• A hand surgeon in California wrote, "I no longer enjoy taking care of ungrateful drunks in the middle of the night for free, attempting to get good results for nonmotivated individuals while incurring liability risk."

• A general surgeon from Missouri commented, "I would consider [call] if I could draw HIV tests."

It has been said that trauma is a young man's game and that people burn out after a period of time. Interestingly, 16 percent of the respondents were over age 60, and 48 percent take call; nearly 20 percent do so on a voluntary basis.

Whereas some hospitals pay surgeons to take call, only 10 percent of the general surgeons, 4 percent of the orthopaedic surgeons, and 14 percent of the neurosurgeons receive additional compensation above their usual and customary fee.

Approximately one-fourth of the replies came from surgeons who do not take call. The most frequent reason given was simply a lack of interest, which accounted for 30 percent. Consistent with other surveys, money does not seem to be an important motivating factor, and was mentioned in less than 2 percent of the replies. Twelve percent of the general surgeons stated they would consider taking call if there were improved compensation and liability relief.

Thirty-one percent of the respondents believed that taking care of trauma patients had a positive impact on their practice. This opinion was true for 29 percent of the general surgeons, 56 percent of the orthopaedists, and 48 percent of the neurosurgeons. On the other hand, 50 percent of the group believed that it had a negative impact on their practice, and 70 percent of the neurosurgeons believed that the impact was negative. A typical response came from a general surgeon in Texas, who said trauma care had "a positive educational effect on practice but a negative financial one."

Malpractice has certainly been a dominant issue in surgical practice and is often cited as a reason not to treat trauma patients. A general surgeon from Idaho wrote, "Since a plaintiff was recently awarded $4.2 million in a trauma malpractice case here, resulting in two doctors having their homes, bank accounts, and pension funds attached, I would need to have at least $5-$10 million of insurance." Eighty-two percent of the respondents believed that trauma care increased their risk of having a malpractice suit filed against them. This belief ranged from a low of 76 percent for neurosurgeons to a high of 93 percent for orthopaedic surgeons.

Eighty percent of the responses came from surgeons who were in private practice. Academic surgeons tended to take call less frequently, and it was not required as often as it was for those in private practice (81% vs. 69%). Forty percent of the academic group reported that trauma care had a positive effect on their practice and 28 percent of the private group felt it had a positive effect. Malpractice was of less concern among the academic surgeons (66%) when compared with private practitioners.

In response to Esposito's Washington study, Don Trunkey asked about availability of satisfactory trauma care in the community.[8] The surgeons in my survey were asked, "If you were seriously injured (hypotensive and unconscious) at 1:00 am, would you receive satisfactory care in your community?" Of those who responded, 75 percent said yes, 22 percent said maybe, and 3 percent said no. Unscientific as this survey may be, it indicates that things may not be as bleak as some would have us believe.

Next I would like to turn to the public's responses to my questionnaire. To put things in proper perspective I asked them to briefly define the word "trauma." Anyone who mentioned the

word injury was given "credit." Thirty-five percent of the public and 20 percent of the executives did not correctly define the term. Thirty-nine percent of Congress and 22 percent of the executives did not even answer the question.

The respondents were asked to rank the following six health care problems in the order of importance as they perceived them: AIDS, cancer, diabetes, heart disease, stroke, and trauma. Contrary to the media blitz, AIDS was ranked number one or number two by only 48 percent of the public, 37 percent of the Congress, 10 percent of the governors, and 18 percent of the executives. Cancer outranked heart disease in each area, and trauma was ranked number five or six by nearly half of each group, except the governors.

It was interesting that 13 percent of the public and 8 percent of the executives either agreed or had no opinion when asked if they could receive adequate care from any type of physician if seriously injured. Likewise, 20 percent of the public and 16 percent of the executives agreed or had no opinion when asked if they thought seriously ill patients could be *well treated* in any hospital, including rural hospitals. The overwhelming majority of all groups agreed it was better to go to a trauma center rather than to the closest hospital even if it meant extending transport time by an additional 15 minutes.

When asked if trauma funding should have a high legislative priority, slightly more than 50 percent of the public and Congress, but only 32 percent of the business leaders, responded affirmatively; approximately one-third of the respondents had no opinion. Fifty-five percent of Congress and 60 percent of the executives disagreed when asked if costs for uninsured trauma care should be the responsibility of the federal government. Less than 30 percent felt that state or local governments should be responsible; however, the public favored state over local funding sources by 67 to 45 percent.

What conclusions can be drawn from all of these findings? First, I acknowledge that these are just opinions from a random, small sample. I do feel, however, that they represent rather typical thoughts and perceptions among our peers and various segments of the population. I also believe that a lack of interest exists and reversal could make a positive impact on six areas: *education, physician recruitment and retention, funding, public awareness, liability exposure,* and *prevention.*

Most academic physicians have no formal training in teaching and in teaching techniques; however, there are educators in many schools who are more than happy to share their skills, as evidenced by the Advanced Trauma Life Support® (ATLS®) instructor courses. Epidemiology and the impact of trauma on our society need to be emphasized in the medical school curriculum, and as much to the profession as to the public. Introduction of the ATLS course for medical students in the senior year might be a good beginning.

The issue of the surgeon as a positive role model should be taken seriously. Quite frankly, I was appalled to read the residents' negative comments, but the explanations they gave seem reasonable. A first step in the right direction has been taken by the Residency Review Committee, which at the urging of its parent organizations and the American Board of Surgery is to be congratulated for relaxing the rigid nonoperative criteria imposed upon critical care fellowships.

Turning to physician recruitment and retention, we find on the one hand that more surgeons are now interested in devoting their careers to trauma, while on the other hand many surgeons prefer not to become involved for a variety of personal reasons. As trauma systems continue to develop and standards are written, we must be sympathetic to our colleagues' concerns. Staffing guidelines must be realistic both in terms of ensuring quality care for our patients and acceptance by our peers. We must guard against rigidity that runs the risk of being counterproductive both in terms of participation and cost effectiveness. We might consider developing an inhouse emergency service of hospital-based physicians who would take care of all surgical emergencies, sparing the practitioner the incon-

venience of disrupting his or her personal life as well as the scheduled activities for the following day.

Comprehensive institutes of excellence that serve large regions and provide in-depth programs from prevention to rehabilitation, including both research and acute care, may have a role in the future. This intense concentration, supported by additional community resources, would allow physicians to be involved at whatever level they choose without the burden of forced participation.

Many surgeons are so busy that additional compensation does not seem to be an important issue for them. I used to think we could entice more physicians to participate in trauma care if additional funding was made available. I am not so sure this is true, as has been noted in numerous surveys. This view may change as the socioeconomic picture becomes more clear. It is important that physicians be adequately compensated for their time and commitment. Efforts should be directed toward ensuring that injury codes are appropriate, and governmental funding agencies must recognize and include comprehensive injury and equitable compensation in their programs.

Funding is a critical issue and has been aggressively pursued through various state and federal programs, often at the urging of trauma surgeons. On the state level, many programs, some court mandated, compete for the shrinking dollars. While efforts to gain governmental support are important, we must realize the process is slow, unpredictable, and, even if successful, often limited in terms of longevity. The Trauma Care Systems Planning and Development Act is a good example. It took five-and-a-half years to pass Congress, and appropriations were only a fraction of what the law authorized. This is a continuing struggle and although there have been many attempts to pass other bills, only too often progress bogs down due to the political process; hence, other sources must be sought. Alliances with the business community, insurance industry, public and private foundations, and the public sector should be investigated. This past Labor Day the Muscular Dystrophy Association raised over $45,000,000 in pledges and an additional $65,000,000 from corporate sponsorships. Trauma certainly affects a greater segment of our population, yet our methods of funding pale by comparison.

The public is probably more sophisticated today in terms of trauma awareness than was the case just a few years ago. However, trauma still does not have a high priority when compared with other health problems. Thirty-five percent of the public and 42 percent of the business executives who responded to my survey could not or did not give a correct definition for the term "trauma." Is it possible that name recognition is part of the problem? It has been suggested in the past that the term trauma should be changed to "injury." There may be some merit to this suggestion. One has little trouble recognizing the term AIDS, and publicity surrounding the epidemic has been very effective in capturing public attention. Emotion is lacking when reference is made to trauma. The American Trauma Society needs our support in this area; a highly visible national spokesperson is sorely needed.

Liability continues to be a major issue. This is an area where there may be a discrepancy between perception and fact. Although over 80 percent of surgeons felt that taking care of trauma patients increases their malpractice risk, there is virtually no data to support this contention.

The medical Inter-Insurance Exchange in Lawrenceville, NJ, writes 70 percent of the malpractice policies in that state. Since 1977, the company has incurred 1,305 cases against general surgeons, of which 34 percent resulted in a settlement payment. Only 187 claims, or 14 percent, were within the ICD-9 codes 800-959.9 (injury codes). Forty-four of the trauma claims, which represented only 3 percent of all the

claims filed, were closed with an average payment of $70,356. This was $28,000 less than the average paid out for all of the claims.

The Physician Insurers Association of America, a subsidiary of the Pennsylvania Medical Society, has compiled similar data from across the nation. Of the 38,025 claims against surgeons of all specialties, only 6,137 (16%) involved trauma patients, and only 29 percent were closed with payment. In other words, trauma claims settled with payment represented only 5 percent of all the claims closed. The percentage of trauma claims closed with payment compared to all claims closed with payment was 13 percent for general surgeons and neurosurgeons, and 42.6 percent for orthopaedic surgeons. In every specialty, the average settlement was less for the trauma cases than for the entire group.

The University of Texas has a self-insurance plan for its four medical schools. Between 1977 and 1992, only 336 claims were filed—of which 36 percent were trauma related. Twenty-six percent of the trauma claims were settled, and 43 percent of the nontrauma cases were settled. The one glaring defect in all of this data is the lack of a denominator, which is the total number of trauma cases.

To solve this mystery, data were obtained from a large Level I metropolitan trauma center using figures obtained from their trauma registry. Between 1988 and 1991, a total of 21 claims were filed against all surgical specialties, four of which (19%) were trauma cases. During that time, there was a total of 13,266 trauma admissions (28%) and 34,005 nontrauma admissions (72%). There was an average of one claim for every 3,316 trauma admissions, compared to one for every 2,000 nontrauma admissions. Of the four trauma claims, all were closed and none resulted in an indemnity payment.

Recent legislation in the state of Texas has addressed some of these liability problems.[9] The state will now indemnify physicians by paying the first $100,000 for an eligible medical malpractice claim resulting from an emergency, so long as the practitioner renders charity care in at least 10 percent of his or her patient encounters. Provisions have been made for a reduction in professional liability insurance premiums and limits have been placed on those who may qualify to testify as an expert witness against a physician.

The final issue I want to discuss is the most important of all: *prevention*. Unfortunately, it is in this area that apathy abounds. Projections indicate the number of trauma cases will continue to increase, although the rate will probably level off at some point in time. We cannot continue to fund and care for the increasing violence in our country; something has to give. It is imperative that we cut off the pipeline for drugs, work with appropriate groups to foster prevention, make safer products, and teach safety more aggressively to our youth. We simply must reduce the staggering number of injured patients to effectively manage this problem. It is a common misconception that injuries are unavoidable accidents, acts of God, or behavioral problems rather than public health problems. The fact is, most injuries can be prevented. Injury is the most costly of all major national health problems, and yet National Institutes of Health injury-related research accounts for less than 2 percent of its budget. Prevention experts agree that three general strategies will prevent injuries: (1) persuasion through educational programs and materials (that is, people at risk must be persuaded to alter their behavior), (2) legislation such as laws requiring seatbelt use or laws requiring smoke detectors in all new buildings, and (3) provision of automatic protection by product and environmental design such as automatic airbags in cars, built-in sprinkler systems, or fire-safe cigarettes. Trite as it may seem but true it is, "an ounce of prevention is worth a pound of cure."

To overcome apathy will take a concentrated effort on the part of many groups working together. Perhaps it's time for another nationally sponsored consensus conference to look at the issues facing "Injury in America." After all, it's been seven years since our last review was published.[10]

I hope that we can move "out of apathy." Trauma is not a new problem—it is as old as mankind. As Dr. Bill Schwab, a trauma surgeon from the University of Pennsylvania, recalled in

a paraphrase from *The Healing Hand* by Guido Majno:[11] What you see is an archaeological sample of prehistoric life from Patagonia. Life is fragile, to be hurt is part of the game. Throughout man's history, there are many ways to be hurt, but regardless of *how*, physical trauma has always fared high on the list of man's problems. Prehistoric man left pictures of himself pierced by arrows. Thousands of years later, trauma is just as inevitable; coping with this reality is one of our chores. And myriads of wounds have become stepping stones to one of man's greatest creations—the art of healing. ◘

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