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What's wrong with TRAUMA CARE?

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Civilization and the graces of life flourish best where there are dedicated and intelligent people...who prefer dignity, fame, authority, prestige, or ease of conscience to mere money.

\- *Luigi Barzini*

Preface

In 1966 two trauma centers were founded—one in Chicago, IL, the other in San Francisco, CA. Since that time there has been considerable documentation confirming the need for trauma centers and trauma systems. Despite this documentation, it is estimated that there are presently only 250 hospitals in the United States that could be legitimately characterized as trauma centers. In addition, there is considerable maldistribution of these trauma centers, leaving much of rural America unserved. In fact, only 25 percent of the population is currently covered by trauma systems.

It seems there is a trauma health care paradox. On the one hand, we know that establishment of a trauma system can save lives and return the patient to productivity within a short period of time. Since trauma is a disease of young people, the resultant cost benefits to society are significant. On the other hand, 75 percent of the country is uncovered by trauma systems, and in some parts of America trauma centers are being de-designated within months of designation. This trend has stimulated the author to ask the question, "What's wrong with trauma care?" After analyzing the many possible answers to this question, I want to focus on the three issues that I believe contribute most to the problems in providing optimal trauma care. These three issues are abdication of leadership, failure to meet the public's expectation, and the "Hunger for More" syndrome.

I wish to stress at the outset that the following remarks are *not* directed to the 10 percent of surgeons in the United States who currently care for trauma patients. These surgeons are my heroes. Nor are my remarks directed at those few hospitals who continue to provide trauma care despite cuts in health care reimbursement. These hospitals have my respect.

Abdication of leadership

As stated previously, trauma remains the number one health and social issue in the United States today. In 1987, there were 146,300 trauma deaths.[1] There were 8,800,000 disabling injuries with approximately

400,000 patients sustaining permanent disabilities. According to the National Safety Council, the costs to society were $133.2 billion.[1] Tragically, the statistics seem to worsen each year and the surgical literature continues to document preventable deaths and disability. At the same time, the evidence continues to mount that a trauma system makes a major difference in outcome. The best results have been achieved in Germany, where the annual mortality from motor vehicle accidents has decreased from 16,000 in 1970 to 8,100 in 1988.[2] Supportive evidence continues to come from regions within the United States where trauma systems have been established and continue to flourish.[3,4]

Within the past year there have been additional articles that have shown the impact of successful rehabilitation following major injuries. In an urban study, Mackenzie followed 487 patients that had been treated at one of two Level I trauma centers in Baltimore, MD.[5] She showed that 80 percent of the patients had been in the work force before injury. Fifty-seven percent of those patients working before injury were working at one year post-injury. Eighty-three percent of the total had returned to full or part-time work, school, or housekeeping one year post-trauma. Significantly, 46 percent of those with Abbreviated Injury Scores of five had returned to work at one year. Seventy percent of those patients with Abbreviated Injury Scores of three had returned to work at one year.

A similar study done in a rural, suburban, and urban region in eastern Pennsylvania showed even better results.[6] Of 302 patients admitted to a major trauma center, 83.1 percent had returned to work within six months. Seventy-eight percent of these patients had Injury Severity Scores greater than 15, yet 70 percent had returned to work. Three years following injury, 81 percent of all patients with Injury Severity Scores greater than 15 had returned to work. Similar successes with rehabilitation have been demonstrated in Europe.[7]

The purpose of a trauma system is to ensure prompt, definitive surgical treatment of severe injuries. A secondary goal is to return the patient to society as a productive member. The evidence documenting the efficacy of a trauma system seems irrefutable. Yet, only 25 percent of the country is covered by such systems. It is my contention that the responsibility for failure to achieve a trauma system countrywide rests primarily on the surgeon.

There are seven steps necessary to establish a trauma system. These steps are to determine need, establish authority, develop criteria with consultation when necessary, democratize the process, obtain outside review and verification, formalize designation, and ensure viability of the system by ongoing needs assessment and quality assurance. I would like to examine some of the steps as examples of failed surgical leadership.

I believe it is safe to say that impediments to developing a trauma system have not come from the public at large. In fact, the public is relatively uninformed about the trauma problem. Many physicians, primarily nonsurgeons, are also unaware of trauma as a health and social issue. It has been my experience over the past 20 years that most of the resistance has come from surgeons and hospital administrators. In order to overcome this resistance it has been necessary in many communities to establish a needs assessment. Invariably, doing so has led to either prospective studies within the various hospitals of potentially preventable deaths and/or disability. In some communities, cooperation was not forthcoming, and it was necessary to conduct autopsy studies. It seems unconscionable that such studies are necessary. Trauma is a surgical disease, yet many surgeons have ignored trauma as a health problem in ***their*** community. Many are very willing to accept the status quo despite the overwhelming evidence that trauma care is unacceptable without a trauma system. In those few communities where trauma systems have been established, it was invariably the result of the leadership of one surgeon.

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Once a trauma system has been established, other problems almost immediately surface. A particularly poignant problem is who will take trauma call. In 1980, when five trauma centers were designated in Orange County, CA, only 23 of the 225 general surgeons in the area volunteered to

take trauma call.[8] This situation is not unique to Orange County. It has been my experience over the past 15 years that only 10 percent of the general surgeons within a region are willing to participate in the trauma system.

A second example of failure of leadership is the establishment of authority. Paradoxically, most communities would not have had to establish a legal authority if the medical and hospital community had cooperated in establishing a trauma system. Invariably, when a need for a trauma system has been established, the hospitals and physician groups polarize as to which hospital will be designated the trauma center. This competition can be fierce and is clearly not in the best interest of the patient or the community. The lack of cooperation inevitably leads to the necessity for state laws mandating a trauma system and establishing a legal authority. This course of events represents a sad commentary on the surgeon's willingness to protect the public interest.

A third example of abdication of medical leadership locally is the necessity to develop criteria for optimal trauma care by outside consultation, rather than from within the local hospital itself. Again, there seems to be a paradox. One can sit down and ask any doctor or nurse what type of care they would want for themselves or a family member if they were severely injured. In fact, I often ask this very question when I visit hospitals for verification. Promptness and quality of trauma care are obvious. Yet the same health professionals, nurse or physician, are oftentimes not willing to take the necessary steps to ensure that such care is delivered within their hospital. Specifically, these individuals are not willing to keep the operating room open at night. They are not willing to have an on-call schedule or a physician in-house to deliver the kind of care that they personally would want to have if they were injured.

A fourth area that serves as an example of abdication of leadership is in quality assurance. During my surgical training and subsequent to that, quality care was assessed at a weekly mortality and morbidity conference. Residents and attending surgeons were held accountable for every single death and complication. Mistakes were made, but we learned from them and profited from the mistakes made by others. Rarely did a surgeon ever make the same mistake twice. If by chance there was a repetitive pattern or if errors seemed excessive, residents were dropped from the program and encouraged to pursue other disciplines.

This traditional mortality and morbidity conference has not survived in the community hospital. It has been my observation in attending some of these community conferences that they are, in essence, a pure whitewash. There is a reluctance to criticize one's colleagues in a closed forum for fear of reprisal or loss of patient referral. When state review bodies and the Joint Commission on Accreditation of Healthcare Organizations visit the hospital, the lack of peer review is obvious and has necessitated nonhealth professionals being designated to come up with criteria and processes designed to measure quality of care. Oftentimes, these processes are flawed and are associated with an ever-increasing burden of paperwork. Most importantly, they do not solve the peer review problem.

There are other examples in which surgical leadership has failed. Medical control in the prehospital setting is totally lacking in many communities. Although not strictly a surgical responsibility, the lack of surgical input is a contributing and confounding factor. Several years ago, surgeons willingly relinquished a leadership role in the emergency room and are similarly relinquishing control of the intensive care unit. Surgeons are relinquishing control of the bureaucracy that now runs our trauma systems. Surgeons are conspicuous by their absence in most communities in establishing meaningful injury prevention programs. Another area that sorely needs surgical input is in regional disaster medical care programs. The victims of disasters are invariably surgical patients, and common sense would dictate that surgical input in the planning process is imperative.

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Professional associations and societies are also guilty of abdication of leadership in solving issues of trauma care. With the exception of the American Board

of Surgery, the American Association for the Surgery of Trauma, and the Committee on Trauma of the American College of Surgeons, most professional organizations have failed to recognize the importance of trauma education, research, and clinical care to the viability of general surgery.

Failure to meet the public's expectations

In order to set the stage for this argument, I would like to give a "firehouse" analogy. All of us have certain expectations for public services. We expect and pay tax dollars to maintain 24-hour around-the-clock fire protection services. We expect that if our personal dwelling or business were to catch fire, there would be a prompt response by professionals who could deal with the fire problem, hopefully save our property, and prevent loss of life or injury. It is my contention that the public expects the same of physicians regarding the treatment of acute illness or injury.

It would be impossible to poll the public at large on their feelings about emergency health care. However, I have taken the liberty to poll a surrogate who I believe can adequately represent the public in answering two fundamental questions. I posed the following question to Albert R. Jonsen, PhD, who is professor and chairman of the department of medical history and ethics at the University of Washington School of Medicine, Seattle, WA: "Does the public expect immediate care for an acute illness or injury?" Dr. Jonsen instantly answered affirmatively. Is the surgical community now meeting these expectations? The answer is clearly no. This failure is documented in our own literature: the preventable death rate in most communities continues to approximate 30-35 percent when a trauma system is not in place.[9]

I also asked Dr. Jonsen, "Does the public expect physicians to give charity care?" Again, he provided an unequivocal "yes." Is this question pertinent to trauma care? I believe it most definitely is. Unsponsored care is a major problem in urban trauma centers today. Many studies have documented unnecessary delays in the transfer of critically injured patients from private hospitals to public hospitals. I find this reprehensible. It is my perception that, since 1966, the establishment of Titles 18 and 19 (Medicare and Medicaid) caused physicians to abandon charity care. Since the advent of Titles 18 and 19, physicians *expect* to be paid for *all* care.

Many surgeons now refuse to provide trauma care to the medically indigent. Tragically, the failure to provide care in a timely fashion has led to unacceptable death and disability in some patients. It would be unreasonable to expect urban surgeons to provide charity care for all of the estimated 30 percent of unsponsored trauma patients in an urban setting. However, it is not unreasonable to expect some fair proportion to be charity work, and *no* patient should be denied emergency lifesaving surgery.

A related problem is that in some communities hospitals are de-designating themselves as trauma centers, ostensibly because of nonreimbursement for indigent care. Although this is partly true, there are often other reasons, such as lack of commitment by the medical staff, and trauma patients being perceived as lower class patients who are disruptive to the hospital. It is a sad commentary on our current state of health care delivery and our value system.

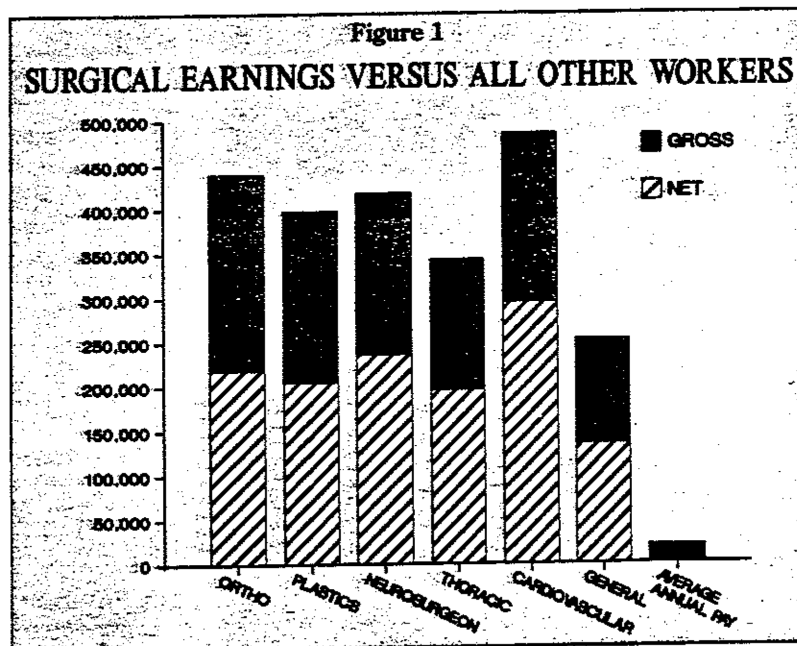
The "Hunger for More" syndrome

Larry Shames recently published a book entitled *The Hunger For More—Searching for Values in an Age of Greed.*[10] This is a provocative book about American values, how they have evolved, and the forces that are bringing about changes. It is his contention that the hunger for more is not a new phenomenon, but started with our frontier spirit and was typified by land speculation. He further contends that there are a number of features of the Hunger for More syndrome. Quality lags behind a sense of scale. There is restless striving instead of an ideal of contentment. The ethic of success is more important than the ethic of decency. Social fashions are more important than self-chosen goals. Following a trend is more common than following a star. A lifestyle is more important than life. The Hunger for More syndrome is best characterized as trying to define success in terms of dollars and by inappropriate taste, self-indulgence, and a loss of values.

Shames' book is primarily directed at American business. He points out that the United States contained seven percent of the world's population in 1953 and produced two-thirds of the world's manufactured products. The same nation owned three-fourths of the world's cars and appliances and purchased one-third of all goods and services available on earth. Shames contends that during the 1950s:

> "The future was being mortgaged, not only in terms of dollars, but in terms of meaning. The more wealth-obsessed we became, the greater grew a

kind of hunger that wealth could never satisfy. Success lost its reference to accomplishment, to high intent, and was recognized only in terms of its reward."[10]



As examples of this crisis in values, Shames cites the 1957 scandal involving Charles Van Doren, who was a contestant on NBC's "Twenty-One." The public was duped into thinking he had encyclopedic knowledge as he won $129,000. Later it was shown that he was a fraud and that NBC executives had participated in this fraud. There was a scandal in TV advertising under the rubric of "schlockmeistering," in which celebrities plugged products in exchange for cash or merchandise. A 1959 New York grand jury determined that 100 out of 150 witnesses lie undeı oath. James Hoffa was publicly recognized as a corrupt union official. During the 1980s white collar crime was rampant. E.F. Hutton was caught kiting checks. The Bank of Boston was indicted for laundering money. Ivan Boesky was convicted as a felon for using inside information on the stock market. Cartier falsified sales records for clients, and Eli Lilly withheld information on one of its drugs, Oraflex, which was known to cause deaths.

Shames points out that this will all change in the next few years as other countries become more competitive with America and the European Economic Community becomes a reality. Shames concludes that, "Our hunger for more—one of our oldest national traits—will have to be nourished by things other than money. Our values will shift so that a sense of purpose, an ethic of service, and a desire to make a difference will be afforded a new respect."

It is my contention that the same crisis in values has occurred in American medicine, and that it has had a negative impact on trauma care. Surgeons' incomes have reached all time highs and are now 10 times the national average.[11] In contrast, prior to the turn of the century, a surgeon's income was only two to three times the national average, and in the 1940s was only four to six times the national average.[12] I believe that this increased income has been a negative incentive for surgeons to provide the kind of trauma care the public expects. With high incomes there is no incentive for surgeons to provide 24-hour trauma coverage, and altruism has not compensated for this deficiency. High incomes might not be an issue if surgeons met the public's expectations.

There are other reasons that surgeons don't want to take trauma call. It is a nocturnal disease. It is disruptive to their social life and it is disruptive to their elective surgery practice. Many of the patients are perceived as being lower class, indigent, and disruptive to a hospital or an office practice. Trauma patients who arrive at late hours can potentially interfere with the next day's elective schedule. All of these factors tend to make surgeons and surgical specialists unavailable for trauma care.

Hospitals and medical boards have become frustrated with the inability to get surgeons to take trauma call in order to meet the American College of Surgeons' optimal criteria for establishing a trauma system. In order to attract surgeons to take call, the hospitals have resorted to paying fees. Those fees are often in addition to patient fees and, in some instances, the hospitals will even guarantee 80 percent of what the surgeon bills. For example, in Santa Clara County, CA, neurosurgeons are paid a $1,200 standby fee for a 24-hour shift.[13] Neurosurgeons in Alameda

County, CA, are paid a $5,000 to $7,000 standby fee per week.[14] Phoenix, AZ, has five trauma centers and the general surgeons are paid an average of $1,500 per 24-hour in-house shift; anesthesiologists are paid $1,400 per 24-hours for in-house shift; and neurosurgeons are paid $250 per night as a standby fee.[15] Those fees translate into $5,748,750 for trauma coverage in Phoenix, AZ, for a one-year period. Is this commitment or greed?

It seems clear that surgeons have not escaped the Hunger for More syndrome. Making money has been equated to success. Lifestyle is more important than traditional values of life. The Hunger for More syndrome is not consistent with the Oath of Hippocrates, the Oath of Maimonides, or the Oath of Geneva.

Where should we be heading? I believe we must meet the public's expectations for prompt surgical care for all life-threatening injuries. I believe we must give charity and at the same time solve the problem of reimbursing costs to hospitals in an appropriate manner. Unfortunately, surgeons have no competition. We are the only professionals skilled enough to care for the critically injured. The public has high expectations of us, and we cannot fail to meet them. We must reestablish our values, insist on fairness, give more attention to purpose, and choose a life, not a lifestyle. We must set up a system of trauma care that is designed for the benefit of the patient—not for the hospital, and not for the surgeon. We must find satisfaction, contentment, and purpose in caring for our patients 24 hours a day and not in making money because of their injury and misfortune.

There is but one rule of conduct for a man—to do the right thing. The cost may be dear in money, in friends, in influence, in labor, in a prolonged and painful sacrifice; but the cost not to do right is far more dear: you pay in the integrity of your manhood, in honor, in truth, in character. You forfeit your soul's content, and for a timely gain you barter the infinities.

— *Archer G. Jones*

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