Presidential Address

The Patient, Burnout, and the Practice of Surgery

DARRELL A. CAMPBELL, Jr., M.D.

From the Department of Surgery, University of Michigan Health System, Ann Arbor, Michigan

AM A THIRD-generation doctor. My grandfather, Dr. Joseph Campbell, practiced in rural Nebraska around the turn of the century. My father, Dr. Darrell A. Campbell, practiced general surgery in a solo practice in Ann Arbor for over 30 years. As you have heard I am also a general surgeon. Our family's interest in medicine has spanned three generations. It is interesting to me to consider the practice of medicine at both ends of this spectrum. My grandfather practiced during a time when doctors were revered, in almost Godlike fashion, for their effort. Sir Luke Fildes put into art what the general population felt in the painting entitled "The Doctor." The doctor cared, the doctor worried, the doctor comforted. Yet in truth, he could do little to alter the course of disease. I practice in an age in which animals are cloned, multiorgan transplants are commonplace and gene therapy is a reality. And yet modern-day doctors are viewed differently. The doctor-patient relationship has become impersonal and in some cases adversarial. There has been an erosion of trust. What accounts for this remarkable reversal? This is no small question, since the doctorpatient relationship is the foundation on which the practice of medicine is built.

Today we hear that 65 per cent of patients are dissatisfied with their doctor.¹ In 1990, it was reported that 26 per cent of patients respected their physicians less than they did one decade earlier.² Fifty per cent of patients reported that they felt their doctors cared less about the patient than previously. James Tate, the American poet, wrote,

I like to see doctors cough. What kind of human being would grab all your money just when you're down? I'm not saying they enjoy this: "Sorry, Mr. Rodriguez, that's it, no hope! You might as well hand me your wallet." Hell no, they'd rather be playing golf

and swapping jokes about our feet.

(James Tate, On the Subject of Doctors from Viper Jazz © 1976 by James Tate, Wesleyan University Press, by permission of University Press of New England.)

It is not my contention that doctors are no longer kind or caring. I know this is not the case. But it is my contention that the patient typically feels that there is something missing in the encounter with the doctor. But what is it? What does the patient really want? Anatole Brovard, the late editor and reviewer for the New York Times, gave us insight when he wrote a classic essay entitled, "Doctor, talk to me."³ He described features of the ideal doctor. "I wouldn't demand a lot of my doctor's time; I just wish he would brood on my situation for perhaps 5 minutes, that he would give me back his whole mind just once. I would like to think of him as going through my character, as he goes through my flesh, to get at my illness, for each man is ill in his own way." And, "To most physicians, my illness is a routine incident in their rounds, while for me it's the crisis of my life. I would feel better if I had a doctor who at least perceived this incongruity." Broyard speaks of the modern-day imbalance between science and art. "Since technology deprives me of the intimacy of my illness, makes it not mine but something that belongs to science, I wish my doctor could somehow restore it to me, and make it personal again. It would be more satisfying to me, it would allow me to feel I 'owned' my illness, if my urologist were to say: "You know, you've beat the hell out of this prostate of yours. It looks like a worn-out baseball."

The patient wants human contact, but the physician finds it increasingly hard to deliver, and defaults to a more technical orientation. Why is this? Clearly, there are many potential explanations. Concerns about malpractice, the intrusion of the HMO, the threat of physical harm, economic factors all could play a part. But among the many potential explanations, I am going to focus on one. My contention is that physician stress interferes with the "humanization" of the relationship to a degree that is generally underappreciated. To understand my point, it is helpful to think about the qualities that make the ideal doctor, and to divide them into two sets. In the first set (set A) are various "competency" requirements, which include knowledge, technical proficiency, a strong work ethic, effi-

Presented at the Midwest Surgical Association meeting, Mackinac Island, Michigan, August 16–18, 1998.

Address correspondence and reprint requests to Darrell A. Campbell, Jr., M.D., 2920 Taubman Center, Box 0331, Department of Surgery, University of Michigan Health System, 1500 East Medical Center Drive, Ann Arbor, MI 48109.

ciency, organizational skills, and confidence. In set B are more intangible, but still important, "humanistic" qualities, which include integrity, empathy, a sense of humor, and compassion. It is possible to deliver excellent medical care to the patient by demonstrating only those qualities in set A, but as was described in previous paragraphs, patients seem to want more, to see set A intersect with set B before realizing the ideal. It needs no emphasis to say that those physicians with only set B qualities do not practice good medicine no matter how popular they might be. Why patients need a doctor whose sets intersect is intuitive; life is precarious, we cling to it, the technological aspects of medicine overwhelm us, and we need a guide through the maze. Pointing the patient in the right direction is not sufficient.

Most physicians have qualities in both set A and set B, and I believe the majority are able to function with both sets fully operative. There is an increasing percentage, however, who function using only qualities in set A, using the default, or competency qualities, and this observation accounts for the deteriorating report card we have received over the past few decades. Interjecting qualities of set B into the relationship with a patient requires a healthy physician, one who has energy and interest. Energy and interest directed toward the patient dissipates rapidly when the physician level of stress rises above a certain point. The physician stress level has risen significantly over the past years.

The point beyond which stress interferes with a doctor's ability to provide a "human" quality to a patient relationship differs from individual to individual and depends critically upon the individual's ability to adapt or cope. The neurosurgeon dissecting an aneurysm may feel less stress than the high school student on the first day of a new job, depending on this ability. This being acknowledged, it does seem clear, however, that stress-related disorders are more commonplace in medicine than in other disciplines. Suicide, for example, is twice as common among physicians as nonphysicians,⁴ and the incidence of drug abuse, alcoholism, and marital problems are higher in the physician groups as well.⁵⁻⁷ Whether these observations result from an inherent level of stress in medical practice that is beyond the ability of the average person to cope, or whether physicians are more vulnerable to stress than other groups is unclear.

There is some suggestion that physician vulnerability contributes to the high incidence of stress-related disorders in physicians. Valliant et al., in a classic and beautifully controlled study, prospectively studied 268 college sophomores over a 30-year period.⁶ Fortyseven men who ultimately became physicians were compared with 79 controls who did not enter medicine. Over the 30-year period of evaluation, physicians were found more likely than controls to use drugs and alcohol, to obtain psychotherapy, and to have troubled marriages. Interestingly these findings could be related to scores obtained from extensive childhood and adolescent adjustment evaluations; the physician group had a larger percentage of individuals with low scores, indicating a troubled childhood. These individuals seemed particularly prone to stress-related disorders.

But who could deny that the pressures of modern practice produce intolerable levels of stress in even the most well adapted? The unrealistic expectations of patients, the changing insurance environment, the malpractice crisis, and the ever-present pressure to see yet another patient (and in 10 minutes or less), pressure of peer review—all these factors have an effect on the physician.

Regardless of the root cause, the maladaptation to stress is an important feature of medical practice. Suicide and alcoholism are obvious manifestations, but stress may affect physicians in more invidious fashion as well. Recent interest has centered on a syndrome of work-related distress referred to as "burnout." Burnout, as defined in the psychological literature, consists of three related components. These are emotional exhaustion, depersonalization, and low productivity accompanied by feelings of low achievement. The depersonalization component refers to the treatment of patients as if they were objects. Maslach has published extensively about this subject over the past 20 years and has described the Maslach Burnout Inventory.⁸ This is a relatively simple questionnaire that asks the respondent to agree or not with statements such as "I have become less interested in my work since I started this job," "I just want to do my job and not be bothered," and "I have become more general about whether my work contributes anything."⁸ A high level of burnout is characterized by high scores in Emotional Exhaustion and Depersonalization and low scores in Personal Accomplishment. A low level of burnout is the converse. Using the Burnout Inventory Ramirez et al.⁹ noted that 38 per cent of 393 British clinical oncologists experienced high emotional exhaustion, 31 per cent had high depersonalization, and 38 per cent had low levels of personal accomplishment. This was not a finding specific for oncologists but was generally comparable with similar studies involving American doctors and nurses,7 North American family practitioners,¹⁰ and infectious disease practitioners.¹¹ Interestingly, those doctors who felt poorly trained in communication skills had higher levels of burnout than those who felt well trained in interpersonal communication. It is of course unprovable, but I find it hard to believe that one-third of the doctors in my grandfather's era would have felt this level of

Campbell

disaffection with work. Maslach has put together a schematic, involving the concept of burnout which seems to apply to modern medicine.⁸ Various demands, which include work overload and personal conflict, stress the physician. Likewise, frustration stemming from lack of various resources such as social support and coping mechanisms contribute to burnout. The result is first exhaustion and then cynicism, which leads to diminished accomplishment and efficacy. The costs are turnover, absenteeism, and physical illness, which includes substance abuse. Apropos of this discussion, an important cost is a deterioration of the doctor-patient relationship.

Surgeons have been studied specifically for manifestations of stress. Green et al. surveyed 1000 members of the Association of Surgeons of Great Britain and Ireland with regard to the incidence of coronaryprone type A behavior and general mental health.¹² Interestingly, the incidence of type A behavior was similar to that in other nonmedical but professional groups. Using the Crown-Crisp experiential index, the investigators evaluated six areas of mental health, which included free-floating anxiety, phobic anxiety, obsessionality, somatic anxiety, depression, and hysterical anxiety. In what might tend to support the stereotype of the typical surgeon, surgeons showed a significantly higher incidence of free-floating anxiety and hysterical anxiety than the general population. Individuals with hysterical anxiety crave love and attention and like to overdramatize situations. Does anyone doubt the validity of these data?

These data document that stress-related disorders are prevalent in medical practice. Specifically, the information regarding high levels of emotional exhaustion and depersonalization noted among physicians supports the argument that stress affects the doctor-patient relationship adversely. Who can listen intently and demonstrate humor and compassion while feeling emotionally exhausted? It isn't possible. This brings up my second contention, which is that physicians don't generally recognize this as an issue, and consequently have done little to address it. Modern techniques of stress management are available and effective and yet for the most part have been underutilized by physicians. We care for others and not ourselves. We have been referred to as "wounded healers." And yet only the healthy physician can reliably mix competency and humanism.

It is not appropriate to identify a problem without proposing a solution. In my mind, the solution lies not so much in currently practicing physicians, but in resident trainees, the future surgeons. The typical surgical residency sews the seeds for future burnout, and worse, by paying no attention to physician self-care. Quite the contrary, the model we as surgical educators have set for the ideal resident encourages traits that will make it difficult in future years to cope with the stress that is inevitable in a surgical practice. Foremost among these traits is self-sacrifice. The best residents do their work, don't complain, and ask for more. Ask any surgical resident the number of hours in a week. This is not a number that the lay population has at the tip of the tongue, but the resident knows the answer without hesitation: 169. There is a reason for this.

The difficulty of the surgical residency has reached amazing proportions, and it precludes the development of any kind of personal balance that could be of benefit in future practice. Zelenock et al. examined surgical house officer clinical activity over a 10-year interval.¹³ During this interval the number of surgical house officers at the University of Michigan remained constant, but the number of surgical procedures per year tripled, the number of faculty increased by 50 per cent. the acuity of care measured by case mix index doubled, and the number of surgical intensive care unit beds increased 125 per cent. The average number of hours worked per week was 111 at the conclusion of the study. As is obvious, this level of work effort leaves no time for anything but surgery. Many categorical surgical residents faced with this workload decide to leave general surgery. Aufses et al.¹⁴ recently reported a 22 per cent attrition rate of general surgery house officers between 1982 and 1995 at Mt. Sinai Medical Center. Major reasons for leaving the program related to "lifestyle" issues in general surgery as opposed to other specialties. More house officers switched to radiology than any other area. The 22 per cent attrition rate described seems significantly higher than the 7.4 per cent reported from a family practice residency¹⁵ and the 1 per cent reported from the Council on Resident Education in Obstetrics and Gynecology.16

Residents who complete surgical training programs frequently express feelings of cynicism, anger, and depression. Over a 5-to-6 year period, trainees learn to suppress needs that are crucial to mental health and that include exercise, sleep, recreation, and family support. Upon completion of residency, the new surgeon, the youngest member of a surgical group, continues the process. But the family is ignored and the patient is deprived of the type of healthy doctor-patient relationship that is desired.

The basic general surgery training program, the cornerstone of modern surgical practice, should change, but in a qualitative rather than quantitative fashion. It should not change in a quantitative way because when it comes to general surgery, there is no substitute for experience. It takes 5 years and 1000 cases to turn out a good general surgeon, and I don't see that changing. The clinical information gained

during residency is imprinted deeply somewhere in our central nervous system, and we refer to it constantly during the course of a career. But there are other patterns and habits that we also pick up during the course of our training and that may be as important in determining our behavior as experience is in guiding clinical practice. This is where we need to make an important qualitative change, because some of these habits are bad habits. We need to show residents which character traits are most conducive to a long and productive surgical career, just as we show them which surgical techniques yield the best outcomes. The character traits I have in mind center around personal balance and perspective, and they result in a satisfying professional life. The character traits we have encouraged in the past centered wholly on work ethic and they frequently result in burnout. How many of you remember sneaking out of the hospital at 7 PM hoping you wouldn't run into the boss in the parking lot? I remember once being invited by a senior surgery resident to sail on his boat in Lake St. Clair, when I was an intern. I asked if I could bring anything, and he responded that the only thing I should bring was a solemn vow never to tell the chief about the boat! And the point is doubly made by considering a classic genie-in-the-bottle joke. The surgical team was making morning rounds: the intern, the chief resident, and the professor. On entering one patient's room, they were surprised to see an odd-shaped bottle. The intern couldn't resist rubbing it, and a genie appeared who immediately conferred one wish to each of the three doctors. The intern wished to be in Acapulco, on the beach, with a daiquiri in his hand. In a poof of smoke he was gone. The chief resident wished to be kissed by Princess Grace, having just won the Grand Prix of Monaco. Poof, in a cloud of smoke he was gone. The genie then asked the professor what he wished for. He thought for a moment and said, "I want those other guys back here by noon."

I have in mind an outline for change that involves three major points. First, and most importantly, we need to change the job description. A surgical resident should learn surgery but should not be burdened with tasks not directly or even indirectly related to the educational goal. We should force hospitals to hire sufficient nonphysician staff to provide excellent care for patients. As we are all aware, house officers are a very cheap source of labor. Relieving the house staff of such tasks as scheduling, transport, and blood drawing will focus the hospital experience on education and allow for other activities. At the same time, more senior surgeons should make it clear when trainees are spending time in the hospital inappropriately, when they are spinning their wheels, as they often do. I recently saw a discharge summary dictated by a junior

resident that was 5½ pages long. It must have taken 2 hours to dictate. I redictated it in 3 minutes, included the most salient points, and showed it to my junior colleague. This needs to happen more often. These two strategies alone could easily reduce the number of hours in the hospital by 25 per cent, without adverse effects on the educational goal. It is the height of hypocrisy to stress balance and personal fulfillment to a young person who is working 16 hours a day 7 days a week.

The second element of my plan involves training in stress management. Time-tested, reliable techniques for stress management are available and have been widely used in the business community, but not in medicine and certainly not in surgery. What major corporation has not used stress management workshops for its senior executives? Our culture has instead promoted stoicism and the appearance of equanimity. The surgical residency would be an ideal venue to teach young surgeons what is known about this subject. McCue and Sachs¹⁷ have published results indicating that a stress management workshop, conducted by an experienced psychologist, could result in shortterm improvement in levels of stress and burnout. In this study medical residents were evaluated before the workshop using two inventories; the ESS I Stress Systems Instrument, which measures stress levels in 21 different areas, and the Maslach Burnout Inventory, already described. Two weeks later they participated in a 4-hour workshop. The workshop emphasized four areas. First, personal management skills were discussed, including prioritization, setting goals, and time management. Second, relationship skills were studied; these included discussions about developing friendships, assertiveness, and tact. Third, outlook skills were emphasized, including the use of humor and creativity, and other discussions about perspective. Finally, stamina skills were discussed, involving exercise, relaxation, and nutrition strategies to strengthen resistance and relieve tension. Six weeks later residents were resurveyed. Scores for all 21 stress systems improved in the group participating in the seminar, whereas scores improved for only 8 systems of 21 in a control group not having participated. Scores in the Maslach Burnout Inventory⁸ were also higher in the participating individuals. These preliminary data in a medical education setting, and the body of positive experience in the business community, suggest an important role for stress management in the surgical training program. Intuitively, one workshop does not seem sufficient; I would propose workshops on a quarterly basis. The cost of such an endeavor is \$25 to \$50 per resident per workshop, which does not seem prohibitively high. An added benefit of this strategy is that it includes a regular, at least yearly, survey of

Campbell

resident stress levels using well accepted measurement techniques. This would be of great benefit to program directors in their regular assessment responsibilities. Presumably these techniques would lower the 22 per cent surgical resident attrition rate discussed earlier.

A similar but not identical program should be developed that focuses on the common nonclinical difficulties encountered by surgeons and specifically in the appropriate responses to these difficulties. Mushin et al.¹⁸ discussed a successful program in a medical residency. Monthly seminars were held regarding such subjects as "interaction with nurses," "the difficult patient," "the difficult family," "management of medical mistakes," and "physician-physician interaction," among others. Importantly, these seminars should be directed by faculty selected and admired for maturity, judgment, and interpersonal skills. As described by Mushin et al.,¹⁸ "The collective wisdom of past generations is often not effectively communicated to ... residents. They are left to reinvent the wheel, not always with the best results. As a consequence, a great deal of stress that can be minimized is introduced with the training process."

My final suggestion for a qualitative change in the surgical residency involves my original subject: the doctor-patient relationship. Surgical residents get some, but not enough, feedback on this critical issue. On discharge from the hospital, or even on an outpatient setting, patients should be regularly surveyed about their reaction to the trainee's bedside manner. My experience is that patients love to discuss this subject and in the context of an educational situation are only too happy to fill out a short questionnaire. Questions regarding a trainee's compassion, empathy, communication skills, sense of humor, personal appearance, and mannerisms are easily posed, and the results provide meaningful information. This should be done on a regular basis, and senior surgeons should counsel residents about the results and expect regular improvement.

If any of my thoughts about this subject are correct, the training period should provide fertile ground for the development of important, but nonclinical skills that are healthy, that promote adaptation to high levels of stress, and that, like clinical skills, can be used as a resource for a lifetime.

When the doctor is well adjusted, has learned to adapt to stress, and has been given feedback about his or her bedside manner, the doctor-patient relationship can only benefit. As Broyard put it so eloquently,³

"Not every patient can be saved, but his illness may be eased by the way the doctor responds to him—and in responding to him, the doctor may save himself. But first he must become a student again; he has to dissect the cadaver of his professional persona; he must see that his silence and neutrality are unnatural. It may be

necessary to give up some of his authority in exchange for his humanity, but as the old family doctors knew, this is not a bad bargain. In learning to talk to his patients, the doctor may talk himself back into loving his work. He has little to lose and much to gain by letting the sick man into his heart. If he does, they can share, as few others can, the wonder, the terror, and exaltation of being on the edge of being, between the natural and the supernatural."

REFERENCES

1. Koos EL. "Metropolis": What city people think about their medical services. Am J Publ Health 1955;45:1551-7.

2. Blendon RJ, Donelan K. The public and the emerging debate over national health insurance. N Engl J Med 1990;323:208-12.

3. Reynolds R, Stone J, eds. On Doctoring: Stories, Poems, and Essays. Simon and Schuster, 1995.

4. Charlton J, Kelly S, Dunnell K, et al. Suicide deaths in England and Wales: Trends in factors associated with suicide deaths. Popul Trends 1993;69:34-42.

5. Thapar A. Psychiatric disorder in the medical profession. Br Hosp Med 1989;42:480-3.

6. Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. N Engl J Med 1972;287:372–5.

7. Murray RM. Psychiatric illness in male doctors and controls: An analysis of Scottish inpatient data. Br J Psychiatry 1977;13:1– 10.

8. Maslach C, Jackson S. Maslach Burnout Inventory. Palo Alto, CA: Consulting Psychiatrists Press, 1986.

9. Ramirez AJ, Graham J, Richards MA, et al. Burnout and psychiatric disorder among cancer clinicians. Br J Cancer 1995; 71:1263–9.

10. Lemkau J, Purdy R, Rafferty J, Rudisill J. Correlates of burnout among family practice residents. J Med Educ 1988;63: 682–91.

11. Deckard G, Hicks L, Hamory B. The occurrence and distribution of burnout among infectious disease physicians. J Infect Dis 1992;165:224-8.

12. Green A, Duthie HL, Young HL, Peters TJ. Stress in surgeons. Br J Surg 1990;77:1154-8.

13. Zelenock GB, Holmes MM, Campbell DA Jr, et al. Quantitative increases in surgical house officer clinical activity as the basis for increased work loads in a University Hospital. Surgery 1992;112:235-43.

14. Aufses AH, Slater GI, Hollier LH. The nature and fate of categorical surgical residents who "drop out." Am J Surg 1998; 175:236-9.

15. Laufenburg HF, Turkal NW, Baumgardner DJ. Resident attrition from family practice residencies: United States vs. international medical graduates. Fam Med 1994;26:614–7.

16. Seltzer VL, Messer RH, Nehra RD. Resident attrition in obstetrics and gynecology. Am J Obstet Gynecol 1992;166: 1315-7.

17. McCue JD, Sachs CL. A stress management workshop improves residents' coping skills. Arch Intern Med 1991;151: 2273-77.

18. Mushin IC, Matteson MT, Lynch EC. Developing a resident assistance program. Arch Intern Med 1993;153:729-33.