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Overcoming adversity—a critical step toward career satisfaction and leadership in academic surgery

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ARTICLE INFO

Article history:
Received 21 July 2017
Received in revised form
22 January 2018
Accepted 23 January 2018
Available online xxx

Keywords:
Resilience
Adversity
Leadership

ABSTRACT

The experiences of life are what shape us. This article relays stories of adversity and resiliency as experienced and told by members of our own surgical community at the Academic Surgical Congress in Las Vegas, NV in February 2017. We aim to express in words the lessons of each experience so that others can learn about life and leadership.

Background

The experiences of life are what shape us. No matter how big or small, profoundly life-altering, exciting, or scarring, whether intrinsic or extrinsic, these experiences define our identities. As surgeons, our identities influence our interactions with patients and colleagues, build our character, and underlie our resilience. Resilience is the ability to respond to stress in a constructive way such that goals are still achieved with minimal emotional or physical detriment.[1]

In his book, Winners Never Cheat: Even in Difficult Times, Jon M. Huntsman, Sr. (W'59), writes "A crisis creates the opportunity to dip deep into the reservoirs of our very being, to rise to levels of confidence, strength, and resolve that otherwise we didn't think we possessed."[2] The following are stories of adversity and resiliency as experienced and told by members of our own surgical community at the Academic Surgical Congress in Las Vegas, Nevada, in February 2017. In sharing these experiences, we aim to bear witness to the often ignored humanity in surgery and to express in words the lessons of each experience so that others may learn about life and leadership.

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0022-4804/$ – see front matter
https://doi.org/10.1016/j.jss.2018.01.035

From Bench to Bar: The Journey of One Academic Surgeon

Steven E. Raper, MD, JD

From the Discourses by Epictetus: "In every affair consider what precedes and follows, and then undertake it. Otherwise you will begin with spirit; but not having thought of the consequences, when some of them appear you will shamefully desist."[3]

Epictetus was a stoic practitioner of a philosophy promoting fortitude and self-control as the means of overcoming destructive emotions and actions. Without delving deeply into stoic philosophy, I have found their tenets as useful guides and commend them to you. In medicine, you have been given a shot at a magnificent career. I encourage you to own your lives, do not settle for what others have planned, or drift aimlessly buffeted by chance. Set goals and abandon them only with the greatest reluctance. If it is your life, and your goals, pursued to the best of your ability, then adversity is easier to bear.

I am fortunate in that I knew I wanted to be a surgeon before I knew I wanted to go to medical school. I initially fell in love with surgery as an operating room orderly in high school. The idea to get a job in the operating room (OR) came after I saw M*A*S*H (the movie). The combination of compassion, technical expertise, and willingness to fight an oppressive bureaucracy manifested by Hawkeye and Trapper John suited my own personality. My grades weren't great, and I needed a recommendation from a rural community to get into the University of Illinois. Once in Chicago, however, I realized I have an urban soul and that the rural life was not for me.

The decision to be a surgeon was easy; but of what kind? This was a hard, very personal choice. I went to my residency at the University of California, San Francisco. I had worked my rear off to do well in an externship and knew this was where I wanted to train. I was initially drawn to cardiac surgery, but at that time, there were few options for cardiac support, and leaving bodies on the OR table disillusioned me. I did research on the liver and suspected that the future was transplantation. However, I would not accept a liver transplant and could not in good conscience ask others to do so. Ultimately, my mentors were general surgeons, skilled in the types of complex, redo gastrointestinal operations that most surgeons would decline to perform, and I found these operations most gratifying.

My first faculty job was at the University of Michigan where I came to know James M. Wilson, a pioneer in gene therapy. We began an *ex vivo* collaboration. I did hepatectomies in patients with familial hypercholesterolemia; we transduced the isolated cells with an low density lipoprotein receptor vector and reintroduced the cells through a Hickman catheter that I placed in the inferior mesenteric vein. This was a great project for me; I could pursue cutting edge research and operate. Jim was lured to Philadelphia, and he wanted me to come along and continue the collaboration. We completed the *ex vivo* trial but then began the next phase of the research in which only intravascular injections of an adenovirus were necessary. I continued to work with Jim and Mark Batshaw, a leading expert in treating patients with ornithine transcarbamylase deficiency. The first 17 subjects tolerated the vector infusion well. The 18th, Jesse Gelsinger,[1] developed a systemic inflammatory response syndrome that ultimately led me to pronounce him dead on September 17, 1999.

This was the first publicly acknowledged instance of death in a 'gene therapy' trial. The federal response was immediate and overwhelming; an Food and Drug Administration (FDA) inspection determined that there were a number of deficiencies in conduct of the protocol, and a subsequent FDA investigation resulted in warning letters to the principal investigators—myself and Dr Batshaw—and a notice of intent to disqualify the sponsor—Dr Wilson. The warning letters were preceded by an open meeting of the National Institutes of Health (NIH) Recombinant DNA Advisory Committee during which commentators speculated we would be publically lynched. There was a firestorm of media attention. The University of Pennsylvania (UPenn) was also subjected to intense scrutiny by the NIH and an external academic review—the Danforth Commission—with regard to oversight of clinical trials. Congressional hearings were held. The US Attorney's office began an investigation and considered filing criminal charges. The publicly available FDA documents, the Recombinant DNA Advisory Committee conference, and other sources were used by the family as the basis for a 'research malpractice' lawsuit.

I ultimately entered into a consent decree in which I agreed to take courses on human subject protection, write a paper on my experience, speak, and use a medical monitor should I conduct certain types of research. On reflection, I identified four challenges associated with the design and conduct of the trial. First, regarding calculation of the risk-to-benefit ratio, we ultimately chose a group of relatively asymptomatic adults after first considering a seriously ill group of newborns; a decision I now regret. Second, the differing reporting requirements leading to a 'Bermuda Triangle' of communication with the FDA, the NIH, and the local institutional review boards. Third, research consent should be categorized differently than standard clinical informed consent, leading to a persistent therapeutic misconception. Finally, there is an irreconcilable conflict of interest between investigator and subject in clinical research, which might best be managed in terms of arm's length contract, not consent. These challenges were discussed in detail in an article in the Food and Drug Law Journal.[4]

This series of events was transformational in my career. It took a mental and physical toll; I was in therapy for 2 years for depression and experienced recurrent bouts of severe pancreatitis that despite every effort remained idiopathic. I am convinced it was due to a mind-body connection. My family was supportive. Perhaps the most important advice I got was from my wife: "We'll get through this, the only thing you could really do to hurt your family is commit suicide" (which I was not contemplating). Several of my colleagues reached out and provided me with solace.

A number of considerations informed my next steps. Having worked in the operating room now for more than 45 y,

[1] Privacy concerns notwithstanding, I will identify the subject as Jesse Gelsinger, after his identity was widely disclosed in the lay press and other public documents.