Lessons learned in the life of a pediatric intensivist

Ashok P. Sarnaik, MD

The metamorphosis from a medical student to a professor is a complex process. It involves not only the acquisition of new knowledge but also the impact of countless human interactions throughout one's life. By necessity therefore, this evolution is a never ending process of enrichment of the mind and the soul. An important contributor to this process is learning from the per-

spectives developed by others based on their experiences. I describe seven valuable lessons learned during my life that may be helpful to the developing pediatric intensivists. (Pediatr Crit Care Med 2009; 10:239–241)

KEY WORDS: life's lessons; critical care; physician attitude; pediatric intensivists; Husfeldt

ach of one's life experiences constitutes a fiber of different length, texture, and color. Eventually, all these fibers make us the very beings that we are. The purpose of this article is to describe seven valuable lessons that served as essential fibers in the fabric of my career. My hope is that they will be useful to young pediatricians with the better part of their careers ahead.

Of God and Humans

My first scientific experiment came when I was 5 years old, with Suman, one of my sisters, as my mentor. A woman of lower caste, considered untouchable, used to come to our building to clean toilets and sweep the compound. The older children in the building said that if you touched her, you would get a disease. After working under a scorching sun, she would ask for water. I liked obliging her by pouring cold water into her cupped hands. Seeing her satisfied expressions after quenching her thirst brought immense joy to me. But I was told to be careful. "Do not let the water from her

hands splash on your feet or you will get worms in them," I was told. Suman taught me about God. She told me God is everywhere. I asked Suman if there was God in that untouchable woman. "Of course" Suman said. "God is as much in her as in you and me." I decided to test Suman's hypothesis. The next time I poured water into her hands, I made sure that some of it did splash on my feet. Growing bolder, the next few times I purposely touched her hands, first time making it look accidental but next time definitely purposefully. I was happy that nothing untoward happened to me. This experience provided unassailable evidence that God exists everywhere, in all of us, and especially in the downtrodden. Later in my career, this conviction grew even stronger with all the helpless and poor children that we care for on a daily basis. Are we not all fortunate, that our place of work is also a place of worship. and that we do not have to go anywhere else to serve God? So lesson number 1 is: To serve helpless children is to serve God.

It Takes a Village

A distinguished career does not happen in a vacuum. It takes the right environment, right opportunities, and even a few adversities thrown in between. Many role models leave an indelible influence that shapes our lives. If we are fortunate, we come across someone who assumes the role of a Guru, a mentor whose disciple we become. The word *guru* is composed of two syllables; *gu* which stands for "darkness" (ignorance) and *ru* which means "dispeller." All of us should have one. Although our teachers have provided us with the necessary scientific facts to deal with daily challenges, our mentor,

our guru, is always there as a guiding light in our moments of darkness and self-doubt. It is important for us to recognize and be grateful to the centers of our education, our teachers, and our mentor. It is this feeling of gratitude that provides us the necessary strength to withstand the rigors of a productive career. Lesson number 2 is: *Be grateful* to the village or the community that has raised you. Gratitude is a prerequisite for success and happiness whereas a sense of entitlement only breeds excuses for failure and disenchantment.

Death, Be Not the End

Perhaps no other subspecialty exposes the emotional vulnerability of a physician than in intensive care. The emotional swings associated with saving someone's life and losing someone to death are all too frequent for us. So, to make it through the daily struggles, we all develop our own defense mechanisms. One of them is explaining away a death as an inevitable outcome of the disease process. I would caution against using this logic, especially in situations that are puzzling. We must always keep these patients with us, even after their deaths, and continue to seek answers. It may take months or years for such an answer to come, but when it comes many other patients will be saved.

I took care of Ruby in 1976 just after becoming an intensivist. Ruby had stage IV Reye's syndrome. This was before the days of routine intracranial pressure monitoring. We simply used mechanical ventilation and mannitol osmotherapy according to clinical examination that consisted of pupillary response and muscle tone. Ruby developed renal failure,

From the Department of Pediatrics, Children's Hospital of Michigan, Wayne State University School of Medicine, Detroit, MI.

Excerpted from the Distinguished Career Award acceptance speech at the American Academy of Pediatrics Section on Critical Care Annual Meeting in San Francisco, October 28, 2007.

The author has not disclosed any potential conflicts of interest.

For information regarding this article, E-mail: asarnaik@med.wayne.edu

Copyright © 2009 by the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies

DOI: 10.1097/PCC.0b013e3181956c44

but after a week or so, she was opening her eyes and yawning, something senior pediatric intensivists might remember as being the first signs of awakening from the coma of Reye's syndrome. Most of the patients who regained consciousness after Reye's syndrome had excellent neurologic recovery. I extubated Ruby and told her parents, to rest up and come back in the morning. In the middle of the night, I got a call that Ruby had stopped breathing, and her pupils were fixed and dilated. I rushed back, only to see the unmistakable signs of cerebral herniation and brain death. I had no answer as to what happened. My seniors told me that such things do happen despite our best efforts, but I knew that there had to be an explanation. A few years later with better understanding of the brain's unique response to its osmolal environment, it became clear that Ruby had died of cerebral edema from osmotic disequilibrium. We were treating her nonoliguric renal failure with replacement of urine output and insensible losses at a time when her brain was still saturated with idiogenic osmoles. The knowledge gained was valuable, as we were able to save other patients with similar pathophysiologic states.

As for Ruby, she remains among my most valued teachers, helping me in caring for patients with altered brain metabolism. After Ruby died, her mother gave me a picture of Ruby and told me never to forget her. It was a promise that was far too easy for me to keep. Lesson number 3 is: Do not explain away an adverse outcome as an unfortunate inevitability of a pathophysiologic process. Keep asking why until the answer comes.

Do You See What I See

As a visiting professor, I was once asked to comment on a chest x-ray. Unsuspecting of my host's mischievousness, I went on to describe the findings: a small infant with decreased lung volume, air bronchograms, and diffuse ground glass appearance. "Hyaline membrane disease," I said matter of factly. "What else?" my host persisted. I looked at the x-ray again; this time more carefully. I looked at the bones and found nothing wrong. I looked at the abdomen and again found nothing wrong. I was puzzled. What does my host want me to see? Putting an end to my misery, he pointed out a structure and asked "What is this?" "Oh my God, that's a tail," I exclaimed in disbelief. My host had tricked me with a chest x-ray of a baboon neonate with hyaline membrane disease, an experimental model that he was working with. I had missed the simple observation of a tail at the end of the sacrum. Apart from being made fun of, albeit good naturedly, this incidence serves as lesson number 4: Your eyes do not see what your mind doesn't think. The corollary to this lesson has been pointed out to me by one of my students i.e., Your eyes see only what your mind thinks. The intensivist must stay alert at all times.

Greatness Comes in All Packages

There are many lessons in life that come from unexpected sources. Ten years ago, I went to the Philippines on an Operation Smile mission. The surgeons operated on about 150 children with cleft lips and cleft palates in 10 days. We worked all day and through late evening, and for a few hours at night, slept on little cots in the hospital room hearing rats running around. Warm water was hard to come by and our meals were cooked by the local people. I was feeling very proud of all my sacrifices. Then one day, a 14-year-old boy scheduled for the cleft palate repair did not show up for his surgery. His name was Victor Cortez. People had to travel several hundred miles for the surgery, and no shows were very unusual. But with no sign of Victor Cortez, we went along with our daily routine. As afternoon rolled around, a nurse told me that there was a boy in the preoperative area asking her when they were going to do his operation. I asked her his name. "Victor Cortez" she said. "What is he still doing in the preoperative area? He was supposed to be the first patient in the morning," I asked. What she told me next was nothing short of incredible. One of the children had spilled water on the floor. Victor took a mop and started cleaning the floor. Another nurse mistook him for a janitor and gave him other cleaning responsibilities. No one suspected Victor was a patient since he did not have a cleft lip, and since he did not speak English and kept silent, his cleft palate was unrecognizable. Victor kept helping out with one thing or the other until he could not anymore. The nothing by mouth status from the night before his surgery had caught up with him, leaving him hypoglycemic and feeling rather faint. When I heard of this, I felt so small

for feeling so proud about my own little inconveniences, when this boy of meager means gave so much of himself with no expectations whatsoever of a reward. So lesson number 5 is: When you give, do not glow in self-adulation but just give and then give some more.

Teacher and Student

To nurture and to be nurtured are among the most cherished of all human interactions. In the academic world these revolve around the teacher-student relationships. Teaching is the most effective way of taking care of critically ill children throughout the world and for years to come. Indeed, our teachers have continued to take care of patients through us as we will do through our students long after our careers are over. As LaCombe points out, "you have teachers, each with students numbering in the thousands, all linked with each other down through the ages-forming a vast, dendritic coalescence of medical knowledge" (1). This network without walls and borders stretches across continents and cultures with a common language of fellowship and duty. We must consider teaching as our obligation to our discipline. One of the greatest joys I have experienced is seeing my students outperform their teacher. Lesson number 6 is: To teach is to touch a life forever.

Every Day Heroes

Throughout history many men and women have made great contributions to mankind. But for every famous person, there are many great souls serving small corners of humanity. The human race is heavily dependent on them to maintain its moral compass. Erik Husfeldt was one such person. Scarcely known on this continent, Professor Husfeldt is a big name in Denmark not only for his contributions in the field of cardiothoracic surgery and anesthesia, but also for his fight for justice, principle, and freedom. From 1940 to 1945 Denmark was occupied by Hitler's army. At great risk not only to his professional career but also to his personal safety, Erik Husfeldt went underground and joined The Resistance, a ring of underground Danish freedom fighters. He assumed the cover name Mr. Jensen, an extremely dangerous and subversive person in the eyes of the Gestapo (2). Erik Husfeldt frequently traveled to neighboring Sweden to purchase Swedish subma-

chine-guns for the Resistance. Back home in Copenhagen, he organized the rescue of thousands of Jewish refugees, admitting and hiding them in hospitals under false identities until they could be transported away to the boats which would take them across the Oresund to safety in Sweden. After the war, Mr. Jensen again became Professor Husfeldt, making important contributions in the field of cardiothoracic surgery. As a leader in the World Health Organization and the Red Cross, he concentrated on health care in developing countries that were left woefully behind in medical advances, which Husfeldt felt was an injustice and lack of access to basic human rights.

In 1953, Erik Husfeldt led a team of doctors sponsored by World Health Organization and the Unitarian Service Committee of the United States. They went to India, Burma, and Ceylon where thora-

cotomy was a kiss of death, anesthesia consisted of a nurse pouring ether on gauze over a wire mesh held on the patient's mouth and nose, and where no such things as respirators existed. Intensive care unit as a concept had not been developed even in the Western world. Erik Husfeldt operated on many patients who were otherwise considered inoperable and depended on his surgical skill for survival. Only a handful could survive because of poor postoperative care. One of them was this author as a 6-year-old boy whose left lung needed to be removed because of extensive bronchiectasis caused by repeated infections from a peanut aspiration. Erik Husfeldt's legacy lives through many lives he has touched, including mine. And that is the magic and romance of pediatric intensive care that has attracted all of us kindred spirits to this wonderful profession. Service to humanity was Husfeldt's mission in life.

Unconditional service with no expectations and great personal sacrifice are the hallmarks of a karmayogi (one whose actions are not prompted by desires), a saint, or a Mahatma (great soul), much like Erik Husfeldt. Although most of us may not be able to attain that status, at least part of our life's activities of that nature are within our reach. Lesson number 7 learned from Husfeldt's inspirational life story, is captured by words of the famous Indian poet Ravindranath Tagore: "I slept and dreamt that life was all joy. I awoke and saw that life was but a service. I served and understood that service was all joy."

REFERENCES

- LaCombe MA: Recent advances. Am J Med 1990; 88:407–408
- Andreassen M, Engell HC, Lippmann O, et al (Eds.): Erik Husfeldt on his 60th birthday. Acta Chir Scand 1961:V–IX