

The Morning Rounds

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‘You’re fine; you’re OK’ just doesn’t help

A child is crying. The mother approaches her to quiet her and says, "You're fine. You're OK."

I see the scene often.

Unfortunately in pediatrics, we sometimes inflict pain to heal. We cause discomfort with procedures that wound temporarily but protect later.

I hear a lot of screaming children every working day. One afternoon a child sobbed and pleaded not to get shots. Though I knew the health benefits, it was sad to hear the intensity of her negotiations. In my "laboratory of human distress," it is powerful to watch parents as they attempt to comfort a tearful child. I remember a father trying to pacify his screaming son with his cell phone when all the child wanted was to be held in his dad's arms. No wonder in midlife crisis, men want a Corvette.

Often, the conversation between child and parent is limited to the parent saying, "You are OK. You are fine."

All of which is baloney.

The child is not all right but terrified or hurt or ticked off enough to shoot the doctor with his own needle.

The bigger question is how does a parent's message teach the child about the world — a world that gets scarier with every news broadcast. Do the parents' dismissing words set against a

frightful world create a pronounced, but silent, lifelong insecurity? It is so easy to criticize the crying child as "being a baby." But with that dismissal, do we lose a chance to provide important lessons?

Words do make a difference; even if we can't take away life's misery, we need to say, "We will still be there." Otherwise our words betray our own insecurity. Consider the following:

When we say "You're fine; you're OK," what are we really saying?

You are all right. You are in good hands. You are safe. This pain and fear will pass.

But what about the other potential subconscious messages?

- You are OK, because we are telling you how to feel. You are OK, because we say so.
- You are OK, because your crying is bothering and embarrassing us.
- You are OK, because we were never taught by our parents how to down-regulate.
- You are OK, because we don't know how to act to secure you, so we are telling you to be fine.
- You are OK, because we can't comfort you, because we are overwhelmed ourselves.

Instead, what would happen if we were to say, "We are here. You are not happy. You don't like what is happening to you.

You are upset."

If we simply describe what is happening we do several things:

- Our vocal tones can provide security.
- We recognize the child's signals.
- We create a script for our response to the child's true feelings.
- We allow the child the opportunity to self-regulate.
- Acting how to be secure is the only true way to educate children how to be independent and self-sufficient.
- Dictating to them how to feel only promotes insecurity.

Commanding someone to be calm does not show them how to do it. Tough love, in reality, only teaches people to be insensitive, not secure in a tough world. Toughness, in the end, is pretty weak.

So remember when there is real pain, you're fine; you're OK just won't do.

Welcome to the Kingdom of Medicine

American health care is so pricey, if we added up all we expend per year we would have our own country.

We have become the United States of Medicine.

Line up the \$1.9 trillion we spend for all the Band-Aids, bowel aids, hearing aids or for treating AIDS with the Gross Domestic Product of all the world's 183 plus countries, and we could buy Italy. Six countries would be richer. Only the United States, France, United Kingdom, China, Germany and Japan can boast of having more money than all the U.S. health-care industry. Talk about big bucks. Maybe that is why we just keep spending the money. We want to own Rome.

With health-care spending as massive as any national economy, there are lessons to be learned from the earth-shattering upheaval that has occurred to other countries since the collapse of the Soviet Union and the fall of the Berlin Wall. Whole systems of production, distribution, ownership and wealth have been disrupted. Whole governments have been toppled. Dictators have been shot. It is called globalization.

Welcome to our world.

Now, welcome to our world of American health care. The rumbling is beginning. In recent months, there are more and more stories of American citizens unable to afford the high costs who are taking both their bodies and dollars and going global to get health care. Outsourcing to India for cell phone customer

service is nothing. How about outsourcing to the subcontinent for heart bypass surgery, total hip replacements and all sorts of medical services? People vote with their feet for better economic futures; now we Americans are voting with our hearts, livers and kidneys.

Globalization is battering the economy of America and threatening the status quo. The democratization of information, technology and finance, according to Tom Friedman in "The Lexus and Olive Tree," have shaped worldwide economics into an amorphous headless upheaval he calls "globalution." Looking around our health system, one sees the cracks in the Berlinesque Wall guarding the massive fortress of health care. Health care is becoming more democratic.

The Internet opens up health information to everyone. Transparency in health care is good. Human error happens in the complex world of hospitals, clinics and pharmacies. No amount of malpractice lawsuits will change that. It has to "come clean" with information and hand sanitizer. From the luxury of our own homes, we can be armchair doctors.

When I was on call the other night, a father phoned asking about his child, who had a fever and a rash. He wondered if it could be a disease he had read about on the Net.

There is also more free flow of capital. It is all about money. Why should a person pay more than \$100,000 for a new hip joint when the same steel and skill are found in Singapore for a lot less? A worker with his own insurance will have to seek the best quality for the least money. He wants medical value not to be tied to employer-dominated health insurance. Health Savings Accounts, HSA, money saved and spent by the individual backed up by catastrophic insurance, gives the dollar power to the people. Giving individuals the same tax advantage to

purchase health insurance as corporations is another small step.

The overthrow of despots and dictators has furthered world democratization. The same will happen in the "Kingdom of Medicine." Bonuses in the millions and billions have to go. A top-heavy medical bureaucracy, executive perks and overpaid specialists are no longer safe.

The democratization of the world economy is being transformed by information, technology and the free flow of capital.

The United States of Medicine is being democratized in this same "globalution."

Bring wandering brains back to reality

A mind is a horrible thing to lose. It is not good to misplace it either. Yet every day millions can't find their wits. They seem to just wander away unnoticed and unawares. Mind wandering and the growing brain drain are conditions of our times. Like global warming, it is only getting worse, and the consequences will be as disastrous.

The effects of minds running around or just stumbling about are enormous. In the schoolhouse, mind wandering shows up as the cute little girl sitting quietly at her desk, not bothering a soul; she is not learning very much either. Being female and not being a nuisance, these inattentive students often go unrecognized throughout their educational career. For the boy who is without a mind bolted in place, the consequences are different. Not only do their minds wander, so do they. Together they meander over to a neighbor. The misplaced mind then heads off somewhere else, only heaven knows where. The moving target is better seen so they come into the pediatrician's office with concerned parents while the daydreaming daughter stays in her own distracted world.

Being a free spirit and going where no one has gone before is part of the power of imagination and intelligence. Mind wandering is the pathological mindlessness. Brains are tutored by the flicker of television screen flashes, 20-second commercials and video games racing around a city street dragging the amygdala along with it. Those games that make the player the active participant are particularly clever to grab the mind and haul it to the violence and mayhem or wherever

the child points the button. Tragically, trips via the Internet can be to places that are exploitive and demeaning. Pornography may start as a mind-wandering experience but ends trapping the senses and judgment of the thoughtless.

The mind also drifts around whole continents of moods and feelings. For the depressed, the trips are often to the past to former slights or other moments of hurt or supposed failure. Depression is a disorder of the past. The mind sops up the memories of self-criticisms or replays the hypercritical voices of well-intended parents, whose own minds many have been somewhere else at the time. The mind beats itself for hours mourning lost hopes or dreams. It sits alone staring out at the dark seeing only what could have been.

On the other side of now, the anxious mind will dash into the future and create what-ifs and the thousands of dreads that could happen but won't for the grace of worry. Failure, doubt or thousands of other ghosts are battled in the frenzy of a mind that is not fortified in the now.

To combat this epidemic of mind wandering there is a school of therapy aptly named "mindfulness." The objective of this treatment is to find the wandering mind and bring it home. The task is to be present, now. It takes practice. The misplaced mind is the last to know that it is lost. Emotional availability is part of presence. Security of a child is built upon the thousands and millions of moments that the mother and father are there and aware. When the mind of a child is distressed, it needs another human brain to be present to teach security.

A father watching his son getting ready on his wedding day approached him with the richest sincerity to whisper the last advice before he wed and left home. Almost tearfully he moved close to his son and said, "Be present in your marriage.

Be there." The only problem is the dad then went off to work. The father did not miss the marriage ceremony, but over the years, his mind had wandered away too often, leaving his son behind.

Before it is too late, we need to reach out and find these millions of wandering misplaced minds before they get lost, beginning with our own.

Parental presence vital in tough times

I want a parent to be present when I inflict pain on their child. Shots, exams, procedures, circumcisions and minor surgery can all hurt or at the least scare a child to death. Some may think that a parent needs to be there for the child's sake; instead, I do it for the parent's. Some don't want to be there. They can't stand watching their child in pain. These are the exact ones who need to be seen by the child even if their eyes are closed. My wish is for the mother or the father to be at the baby's side to learn the tough lesson of being emotionally available in the rough times.

There will be moments in children's lives when there is no bandage big enough to cover the pain. There will be hurt. There may be nothing that can change it, stop it or make it go away. Sometimes the damage is deeper than a scrape and longer lasting than an ouch.

The pain can be failing in marriage or career, abandoning family standards or being forsaken by friends; sadly there could be worse disappointments. A son or daughter will go to jail or contract some awful disease or pick up some horrible addiction. The practice of being there when a child gets shots, has a procedure or even a circumcision will be practice for the big-league troubles that may come and for the minor-league struggles that most assuredly will.

Mother Teresa, the saint of Calcutta, and now her disciples are recognized as the ones who care for those who no one else will touch. The poorest of the poor have the diseases of poverty

that often attack the flesh. Ulcers, boils and the accompanying flies, odors and repulsion are the plagues of their brothers and sisters of the street and gutter. It is exactly because they are diseased and rejected that these marvelous nuns are drawn to them. Taking them in, these living angels wash the wounds and doctor the sores. If they can do nothing more, they make certain the "least of these my brethren" do not die alone.

Being present to the end or in painful moments is very hard for some. Even the most dedicated parent or disciple will sometimes shrink from the challenge. However, this is exactly when we need to be there. Mother Mary remained on Golgotha even though she could hear the sound of the pounding hammers. Providing comfort at a time of discomfort or staying locked in resolve by standing with a child when everyone else is escaping are hallmarks of parental courage.

So you can imagine how I feel when I hear that a parent can't stand seeing their child suffer. It is to both of them that the healer must attend. First to the child in distress and then to the parent who is suffering with their own anguish and fear. However, it is not just the crying from injections that we need to endure; it is also the thousands of variations of simpler suffering. It is being at the side of a child who is sadly overweight, and we hate obesity. It is being attentive when the child is struggling in school, and we can't stand failure. It is watching a child lose, and we abhor defeat. It is being still when a child is wrong, and we must be right. It is embracing a child who is imperfect, and we think we are not.

This doesn't mean to do nothing as they hurt themselves then stand back and say we told you so. It is hugging the dirty child in our clean clothes. It is loving them for who they are and not what we want them to be.

It is love and relationship first, our personal wishes second. It is being there and sharing the pain together even if it is just shots.

Dial down the noise or we'll all lose our hearing

The word "what" is increasingly part of my vocabulary. Over the years I have examined thousands of children's ears. I look in their ears; they scream in mine. A fair exchange you say. It looks like they have won. I am joining the ranks of the hard of hearing.

Acoustic trauma, the battering of the body's hearing apparatus, leaves bruises that eventually don't heal. High frequency hearing loss often accompanied by tinnitus, a high-pitched whine, are the results. One can't hear certain pitches, and the constant squeal reminds the person, even in silence, that they can't hear.

The auditory system, part of the five senses, is divided between the conduction of sound waves and the neurosensory transmission. The temporary decrease in hearing due to excess wax build up or an occasional ear infection is due to the disruption of the conduction of the vibration from the air through the ear canal to the tympanic membrane, the ear drum, to the oscillating bones of the middle ear. This is the chamber that can fill with fluid and stuff of ear infections. It is tough to hear parents say, "Clean your room" when the ear drum doesn't move and the bones are tampered down by slimy mucous.

The inner ear, the nerve center, with its fine cochlear hair cells, is the bull's-eye of the damage of noise. It is like overdosing on sound. Too much of a good thing does harm. It is said of eating; it is applicable to hearing. Of all the senses, hearing is what connects us as talking humans. Someone said that while blindness separates someone from the world, deafness

separates someone from others.

That is not to say there is not a world of communication with hands and lips. It just makes it tougher. But looking around, there appears to be an all-out declaration of war against our ears. It seems like everyone is sprouting ear buds. Teens to titans of business are plugged in and tuning out. Wires are dangling from every pinna (meaning wing) of our external ear. Where before there was cerumen (ear wax), now there is a wire sticking out. Rocket-age and missile-shaped devices are strapped on to hear every conversation, every call, continuously. It is an orgy of noise.

In days past it was the construction worker or the artillery soldier who boomed their ears to death. Now they wear protective gear, and it is the office worker and the art seller who blast away at their cochlea. As the assault of sound multiplies broader and wider it is also attacking the younger and the more innocent. What parent has not had to tell their child to turn off the (fill in the blank) radio, MP3 player, iPod, CD, TV, computer, phone...?

From any boombox there is the collateral damage. It is not only the loss of hearing that is sad; it is the loss of conversation that is tragic. Who can hear when everyone is listening? In public and private, talk has disappeared. One wonders if that is another reason why political debate in this country has deteriorated to talk show hosts yelling. No one hears and no one listens. In other times political aspirants were elected because they could speak and debate. Lincoln was Lincoln because he could use words, and we still listen to them today.

Sound bites have replaced dialogue, and deafness to thoughtfulness has resulted. Hearing is a precious commodity. Just ask someone who is losing it. We need to protect it. Turn

down the volume not only on our iPods but also the political shouting. Put on hearing-protection devices when exposed to loud noise. I use my stethoscope in my ears to not only hear heart murmurs and lung sounds but to not hear the loud protestations of my cold stethoscope.

Pull the plugs on our children and start talking to them softly. We need to do a lot more of whispering sweet nothings into everyone's ears. Or it will be nothing that we soon will hear.

The most harmful lies are those we tell ourselves

As parents we get pretty upset when our children come up to us and say their homework is done and later we find out it just isn't so. Yet, why do we tolerate the thousands of lies we tell ourselves?

Psychologists don't call them falsehoods per se, but distorted thinking is a form of lying. We do it all the time, often not even knowing that we are fibbing. Distorted thinking is such mind-speak as "I can't do it," when the truth is closer to "I don't know how and I am embarrassed to ask."

More than 30 years ago, Aaron Beck pioneered the work of cognitive therapy. He promoted the concept that thoughts create feelings and not that feelings make thoughts. Think about a situation and how feelings flow from the thinking and not from the action.

Someone calls you stupid. You think they are right. You feel dumb, hurt, etc. Now repeat the scenario. Someone calls you stupid. You think they are two fries short of a Happy Meal. You feel sorry for them and wonder if they were dropped at birth. The insults are the same, but the emotional results are totally different. Thoughts do make the person.

These lies or half-lies and distortions have been categorized. The list varies with each author, but here are some of the more common ones with my own marvelous monikers:

- Magnification: We mentally make a task, comment or event greater than it is, or on the flip side, we enlarge the negative.
- Marks: We place labels on things to simplify or to excuse. If a teacher is incompetent, then I don't have to do my best.
- Me: We personalize situations, thinking it is only happening to me or I am the only one suffering.
- Mind reading: This means we assume we know what others are thinking. "I know they don't like me."
- Minimization: We often dismiss certain qualities or ignore the positive.
- More: Consider how we exaggerate our thinking; once in a while becomes always, infrequent is never, and a few is everyone.
- Musts: This is the common habit of making everything a must, instead of remembering there is power in saying "I choose."
- Mystic: We act like we know the future. Fortune telling is the malpractice of saying, "I know this is going to be impossible." We go around telling these various un-white lies to ourselves over and over again without flinching or stopping and raising our hand and saying, "Excuse me, but I don't believe that is completely true." When we don't call ourselves on these untruths we begin to believe them.

The good news is, like a reforming addict, there is hope for us. There are means to rehabilitate our minds from the dependence we have on our corrupted cognition.

The first step is to listen to ourselves talk; tune into our conversations with ourselves. Test if the words we use fit one of these distortions. If they do, perhaps the subsequent feeling is not justified. We can also follow feelings back to the originating thought. If I am discouraged, what thought triggered that emotion, and is it true? One of the best exercises is to write down the common situations in which these thoughts pop up without invitation. Then identify the distortion and have a substitute thought ready to replace the deception. One of my favorites is, instead of pressuring myself with all the musts and shoulds, I tell myself, "I choose." The power reverts from the rules to my agency. We all should be nice, but we do better when we choose to be so.

So when we lie to ourselves, find that error and stamp it out with another thought before our feelings get wind of it. It seems both Aaron Beck and the psalmist were right when they supposed, "As a man thinketh so is he."

'Un-run' your way to better health, less stress

Attention one and all: athletes or not, active or sedentary, first stringers or bench warmers, old or young — this is the announcement of the first "un-run." No, this is not jogging a 5K backward, but it is still a workout. Couch potatoes, fear not. It is something even the greatest of you can do.

The un-run is the exercise of reversing what your body does when it is stressed. The human body was created long before our modern-day stressors. There were no deadlines in Eden, nor a lot of laundry or kids to pick up after. There were not a lot of important decisions to make — at least not before the problem of good and evil came up. But once in the cold cruel world, our ancestors had to deal with lions, tigers and bears. To be in the human race, our forefathers and mothers had to do a lot of running. Being chased by the lions, tigers and bears is what our bodies are primed to do. So our response to the new animals of stress — such as bills, homework, jobs, crying babies — is much like running. For children there is a zoo full of stresses such as parental disharmony, divorce, poverty, violence that provoke the need for them to sprint as fast and as far as possible on little kid legs.

Sadly, you can see youngsters and grown-ups exhausted from the ongoing marathon.

Our urge to skip out or ditch a tough setting is merely the body's way of trying to protect us. We remain safe. We remain capable of being parents. Job one is for the brain to protect the chromosomes. So in a stressful, frightful situation the brain

recruits our whole being in the running response.

Think about what the body does to run. The breathing increases to bring in more oxygen, the muscles tighten to increase speed, the eyesight switches to distant vision to search out the best escape route, thoughts become more scattered — scanning for the multiple options of flight or the weapons and tactics of fight. The senses sharpen to hear the competition's footsteps. We stop eating, fearing our sandwich will be our last meal and we will be the first snack of something faster. We are transformed into a racing machine.

The body also does an interesting thing when the stress juices start to flow. It checks back with itself to see if this a real fire or just a drill. It is the old saying — I am stressed, therefore I run. I am running, therefore I must be stressed. It is this circuit that un-run undoes. It becomes: I am stressed therefore I run, but — hey body — look! I am not running therefore, I must not be stressed.

The meditative arts employ elements of the un-run to seek peace and tranquility. Concentrate on breathing and slowing down the respiratory rate in counts of in five and out 15, or in four, hold four, and out eight. This will reverse the race from fear.

Breathe slower, telling the scared centers in the brain, "There is no lion because if there were, I would be breathing much faster." Focus on a near object to bring vision to a closer vista. Don't look for an escape. Stretch muscles, as in yoga, telling the body "I am loose; my muscles are not taut, therefore, I am not being chased by a bear."

Decrease the sensory input to turn down the volume of stress. Chewing and sweets imitate a meal that says this is not my last supper. Undoing the body's flight undoes the feeling to flee.

Today's rat race is not to the swift. Victory will be to the best conditioned in the slowdown art of the un-run.

Try to see world's wonders through child's eyes

The other day I had a vision that was heavenly. I saw a mother see the world through the eyes of her child. It was an ordinary day. I was not in any place special, no mountain top or grove. (Is a pediatric office considered holy?) The mom had her child on her lap. The baby was about 9 months old. The mother had a book in her hand. Almost without perceivable motion her daughter turned to notice some drawings.

"You see the book." That was it. It was a miracle before my very eyes.

This mother, like so many other good women, saw the book as if she were 9 months old. It was incredible to think that this adult of two decades or more had become like a little child. The light from the object traveled through the lenses of the baby to the brain and then on to the brain of the mother. Their brains for an instant became one, looking at the same ordinary simple book of pictures. It was divine.

At the one-year exam I will often comment that the parents and the child have circled the sun once. The journey together crossed millions of miles of space and took over half a million minutes. The child has grown, tripling her birth weight and has transformed from a fetus to a child who can walk, feed herself and understand between 100 and 200 words. In that time the infant has imprinted onto a person who has become her major attachment figure. This person is now the child's tour guide to the galaxy. If done right, the parent teaches security, promotes curiosity and discovery while giving not only words to the

objects seen but meaning to the things she feels. The infant brain cannot do all of that on its own.

Sometime during the few minutes together I will occasionally ask the mother or father, "What have you learned about the world this past year from your child? What has your child taught you?" One father immediately answered, "Ants." The son had discovered these amazing insects as they marched along their trail on the driveway. The father had rediscovered these fascinating creatures along with him.

Nature does everything it can to prompt the parent, especially the mother, to look into the eyes of the newborn. The orbits of the eye are large relative to the face. The child increases the scanning back and forth of the parent's eyes as the guardian talks to her. The infant will momentarily open her eyes as she starts to feed like a gesture of thanksgiving. The pupils enlarge with excitement. The optimal viewing distance of the baby is 8-10 inches, the distance between the two faces as one feeds the other. The human eye has a white sclera that helps the other members of the species to follow where they are looking. There are multiple enticements.

It is the parent, then, who must do all he or she can to be able to see through the eyes of the child.

Wouldn't it be wonderful if we could always perceive the world through their point of view? We could recognize how hard math homework is or how threatening a little brother is when he plays with his sister's toys. We might look upon broccoli with a whole new disgust, or witness how junior high should be outlawed after being shoved into a locker for the third time. Lastly we will learn what appears beautiful to our child.

Possibly the greatest vision would be to view ourselves as parents through their eyes. Do they see concern and love and empathy or would they see a bully or maybe not see us at all? Heavenly visions could be ours every day through the eyes of our children. We just need to stop to take a look.

Prayer is probably medicine's miracle

Do I believe in miracles in medicine? Absolutely. If my friends look at the fact I was accepted to medical school, and then finished a prestigious pediatric program on the East Coast, they would say that was an act of divine intervention. It depends on how one defines a miracle. If we Americans call beating the Russian hockey team in the winter Olympics at Lake Placid a miracle, then all of medicine is one big fat miracle. But even by more rigorous definitions there would be miracles daily.

There are the lame who walk and the blind who can see. An orthopedic friend fixed the fractured hip of a lady who had been confined to her bed for years. She could walk. An acquaintance who is an ophthalmologist routinely travels the world and spends endless days in a makeshift operating room doing one cataract surgery after another. She performs a miracle of giving light to the many who have lived in the dark. There are women who nature has made barren who bring their children to me who were conceived outside of the womb in a petri dish. One has twins, and it is a double miracle how she is able to keep up with them. Fetus born too early, hearts that fail, or kidneys no longer functioning are treated, cared for and some organs replaced.

A good mentoring friend started to become slower in thought due to chronic hepatitis. He was fortunate enough to have an anonymous family donate the liver of a son rendered brain-dead in an accident. At about the same time his lovely wife was diagnosed with a commonly fatal cancer. Both are alive

today and still do much good. That is a miracle.

But what about the real miracles and not just marvelous fruits of advancing technology? If the faithful and the unbelieving have heart transplants and they both live, is the first a miracle and the other a medical triumph?

A young boy was incidentally found to have a growth near or around his adrenal gland. For someone his age that is generally bad news. The first and second diagnosis is neuroblastoma, an embryonic cancer. He was prayed over and had other rituals of healing administered to him. When the surgeons went in to take out the cancer it turned out to be a mass from some unknown hemorrhage. Did a genuine miracle occur? We will never know. It could have been the wrong diagnosis all along, but there is no experiment that would prove it.

That is not to say physicians are miracle workers in the saintly sense. We would all drown if we tried to walk on water, or at least the cuffs of the surgeon's scrubs would get wet. We are more likely to say "hell" when we make a mistake instead of singing a hymn. We work hard but still need to learn more and be kinder. There are some true saints among us, but they probably would have been holy even if they had gone into construction work or busing tables.

Somewhere it is written that the soul of men and women is made up of both the spirit and the body. I believe that. So as "body mechanics," physicians can only deal with half the solution.

When I was growing up my parents were older and their siblings were even older. So when a brother-in-law was felled by a heart attack or a sister had cancer, my parents would gather us around and pray for the beloved sick and afflicted. They would

also slip in a word or two for those who cared for the sick and cured the afflicted.

Perhaps the miracle of medicine is not anything the doctors and the nurses do. Instead, maybe the miracle is in the prayers of others for both the patient and the practitioner.

Doctors and terrorism: Those who cure also kill

Primum non nocere. First, do no harm. These Latin words, paraphrasing language from the Greek Hippocratic Oath "to help, or at least to do no harm," have been the center of medical ethics for more than a century. Now with the recent involvement of physicians in failed bombings in London and a fiery crash in Glasgow, it brings into question the role of doctors in revolutions.

The father of American pediatrics, Abraham Jacobi, was expelled from Prussia in the 1850s for his political views. Che Guevara studied medicine in Argentina before he joined the armies of Fidel Castro. The current No. 2 man in al-Qaida, Ayman al-Zawahiri, trained as an Egyptian surgeon, and a former leader of Hamas, Abdel Aziz Rantisi, was a pediatrician before the Israelis took him out with helicopter-launched missiles. Before that an Israeli medical student had assassinated Prime Minister Yitzhak Rabin for his desire for peace. The wanted list goes on.

In the London attempt, as in any terrorist act, there was not only the desire to inflict damage. There is a greater wish to create terror. What is particularly distressing in this case is the intent to inflict death and harm to the innocent passer-by. Blowing up a car is one thing — to damage nonliving and nonbreathing property — but adding nails to the toxic mix created anti-personnel weapons with the only intent to hurt the living. Adding to the chill was the cryptic message passed on to a British cleric in Jordan some months before, "Those that cure you

will kill you."

Are we that mad as a world that those who have sworn to treat fellow human beings in order to heal — and if not to stand by the family and patient in time of passing — are now the same ones to hasten that moment in intent?

There is self-selection of those who enter the field of medicine. For the most part they are bright and caring. In the United States there is further narrowing of the field by committees of admissions. They choose and pick from generally a broad array of candidates who have shown with test scores, grades and extra activity their worthiness to become students of medicine. It will be only later, after performing satisfactorily in that four-year marathon and then a residency, that they are officially doctors of medicine permitted to practice the art and science of their profession. They start out wanting to do what is right for their patients.

Idealism is a common trait among the eager students. Perhaps it is that grand illusion and an equally inflated image of themselves that prompt some to turn from rounds to bullets. There may also be the disillusion that as doctors with the newest drugs and finest instruments, people die. Or even as the patient walks out of the hospital on new artificial hips and joints they will have to limp back into their poverty and pain. But where does this anger give permission to anyone to blow up innocent people?

Another explanation for the inexcusable is that in other countries the selection of the physicians is different, and the sadistic and the perverted can enter the classes on anatomy or practice the intimate examination of the human body. They intentionally learn about the heart so they can stop it; they diligently study the brain to destroy it; they read about life to

take it. But the arrangement of different people and various places would suggest this is not a worthy answer. Nor is it religion, because in the examples above, Christian, Jew and Muslim students and doctors of medicine all joined in the carnage.

It is far more likely that this transformation from the healer to the heathen is part of a great mutation of men who by intelligence become consumed in their own anger and self-righteous importance. For some sick souls, the elimination of societal cancers with a sword is akin to treating of the ill with surgery. Their arrogance has killed their reason, and civilized society has the right to terminate their evil.

How to cope with top medical issues for children

What are the top medical issues in children for this decade and beyond? Here are my big five: metabolic, moods, mental, mothering and money.

Gone for the most part will be the diseases that inaugurated every pediatrician by fire — childhood meningitis and the other vaccine-preventable diseases. That is not to say they will be eradicated off the face of the planet like smallpox, but the morbidity and mortality of children have shifted over the past 20 years. These are the issues that have filled their places.

Metabolic: Anyone missing the increasing concern for and girth of American children must have been in line at a fast-food chain.

Diabetes and all its associated curses are now a problem with kids. In fact, the insulin-resistant form of diabetes had to undergo a name change because it was no longer the domain of overweight adults. Included in this category of concern is the malnourishment that includes low iron for infants, a radical disequilibrium in the essential polyunsaturated fatty acids, the omega-3 in fish oil and the omega-6 of vegetable oils. There are also reports that there has been an underestimate of the people with low vitamin D. This doesn't count the number of children at daily risk for general nutritional insufficiency (translate, hunger).

Moods: I see more and more children who are suffering from some type of mood disorder of anxiety or depression. I don't want to treat these kids with drugs, but if other modalities of

change don't work, many of these patients are dramatically improved with antidepressants. The point is that they are out there suffering perhaps the same as generations before, but they are increasingly visible.

Mental: Of course moods are mental, but in this group I would put the issues of behavior, substance abuse, learning problems, attention-deficit hyperactivity disorder and other problems such as autism. These problems can consume both a family and its resources.

Mothering: Being a good mother is always a challenge, but when a woman is pulled in so many different directions by societal demands or personal needs, it puts the critical human relationship between a mother and a child in jeopardy. This is also where I would put the need to know even in the best of families about our parenting styles to see if they provide the maximum security for all children.

Money: Ah, yes, you knew it was coming. It always does. It is not that we have too little. There is too much money in the system. There is an interesting paradox; the more we spend on health, the less we seem to be willing to pay for prevention, especially in children.

We have created this system of chaos, and it is producing exactly the confusion and costs that it is designed to do. We could spend less on diabetic drugs if there were nutritional- and activity-centered programs before the weight piled on. Or just turn off the TV and walk.

We could, as a society, honor the value of mothers beyond phone calls in May. We could realize being a single parent is not good for anyone. Men could become husbands and fathers,

not just sperm donors.

So here is the medical problem list for kids. But the solution is not more prescriptions. It has to be a cultural and political shift of value priorities. Everyone — parents, teachers, advocates, celebrities, pastors, business executives and doctors — has a part. In an elected democracy political leaders need to act more on their speeches of motherhood and a touch less of apple pie. We all need to act, otherwise the five Ms will become six, seven, eight — and many more.

Smokers: Reward success, don't punish failure

To the smokers of the world: Puff on. At least for the next couple of minutes while we chat. You are not ignorant; you are not stupid. You are not evil. Let's save that title for the executives of the tobacco companies. You smoke for a good reason. You know so much about smoking you don't need another cigarette cop telling you what to do.

You understand the bad things it does to any named body part. You are knowledgeable about secondhand smoke. You also are aware that your kids especially are at risk. We're talking about your unborn children, too. The part that is so interesting is how you would do anything for your children. You would risk your life for them. An oncoming truck would not stop you from leaping to their rescue.

In spite of that love, giving up smoking is hard even knowing your infants are going to be more fussy and colicky. It is especially hard knowing children of smokers are at increased risk for school failures and 19 times more likely to have behavioral problems. Ouch.

You personally feel there are a lot of people against you and your smoking. I am not one of them. I am not against you. Here's why. A psychological magazine several years ago reported on an interesting experiment. The researchers took a group of smokers and asked them to quit. Some did and some didn't. Then they looked back at the two groups to see if there were explanations for the difference in the outcome. Was it the amount the people smoked? No. Was it the brand? No. Was it

the years that they had smoked? No. There were quitters and continuers who had identical profiles.

So what was the difference? In this test, the only thing they could find was the successful quitters rewarded and didn't condemn themselves. Those who ultimately failed punished and criticized themselves all along the way. That is why I don't want to be one of those that gang up on you. I want you to know of my respect. Don't get me wrong. I want you to quit yesterday both for you and our kids. In my office I tell people I am concerned for them, and the moment I stop encouraging them about their quitting is the moment they will know that I no longer care.

There also may be one thing that you don't know. Why do you still smoke? Sure there are a hundred stories why you started. But, according to the study, that didn't have any influence on the success of stopping. While a lot talk about the addictive power of nicotine, others of you do it for the release of tension. You can see why an anxious smoker is nervous to stop. That's why I come back to the start. You are not dumb; you smoke for a reason that presently outweighs the reasons to stop or the reward system to help do it. If your smoking is self-medicating, treat yourself for the anxiety and stress with other drugs that do the same thing as nicotine without all the poisonous collateral damage. There are meds out there that you could use instead of the nicotine at about the same monthly cost. Try it. See if that helps with the stress. If it doesn't do the job, there are other things you can do with either other medicines or other calming techniques. Focus on the reduction of tension, including the pressure of self-criticism.

So, smokers of the world, you are going to quit eventually. Either at death or sometime in between. Why don't you reward yourselves now; set a date; recognize and treat the anxiety or

the addiction. Tell your friends. Buy a gift for yourselves from the savings. Compliment yourselves all the way to quitting. And my office has some colorful stickers to celebrate your triumph.

Hospitals are magical places of life and death

Baby-boomer doctors are retiring at an increasing rate as they and their patients age.

Hospitals, on the other hand, don't quit. They may be sold or imploded with explosives, but most would just keep on going forever if they had their say. The hospital where I have practiced for the last quarter of a century is being closed. Down the street a ways a brand new multistoried, multimillion-dollar megafacility is poised to replace it. There is no question the new medical center with a campus of buildings will be the latest and the greatest.

But this is not about the future, it is about old hospitals. You can't turn them out to pasture or give them a gold watch. Sure the buildings could be transformed into an office building or a convalescent center, but the memories will remain. It is within those walls that people were born and died.

It is impossible to reconstruct even a fraction of the stories that the walls could tell. A whole city of children started life there.

Women came in pregnant and left with a newborn infant in their arms. When the children became ill, they were returned to their place of birth to be healed from some infection, trauma or disease. One didn't actually have to be in the hospital to feel better. Being in the back of the ambulance as your child is transported to the one place you know will provide him the comfort from his screaming hurt and will permit him to walk again, one could almost feel the hospital as the paramedics

drove faster and nearer. From the tiniest to the most difficult, they were cared for by an army of concerned nurses. These incredible women never can be honored sufficiently or long enough to satisfy what they did at all hours of the day and night.

A hospital is a living symbiotic colony of nurses, respiratory therapists, physicians, technicians of all kinds, clerks, cashiers, volunteers, aids, administrators. There are the blue- or green-gowned surgeons and operating-room teams, anesthesiologists and scrub techs. There are the wonderful men and women who clean up the mess, throw away the trash and wipe away the blood. The meals, the meds and the machinery need to be prepared, dispensed and maintained. Hospitals are the culmination of all good things. Dedication, sacrifice, innovation, science, education, faith and hard work are all exercised for betterment of humankind. In them people go to be healed, to be freed of pain, to restore what life has taken or repair the imperfections of mortality.

Hospitals also are places where people die. That includes those who can't wait to leave this Earth and others who are not supposed to go but there was nothing that could stop them. Watching family members hold their 17-year-old son wasted with muscular dystrophy as he no longer had the strength to breathe will be with me forever.

Moving the contents of a hospital does not carry the memories: the visiting of a loved one, praying for the sick, gathering the family from afar to be at the bedside of a dying parent or walking out alive after days and weeks of treatments and therapies, especially when no one thought you would.

It is at night in a hospital when the adrenaline is still surging from the rush of a resuscitation that resurrected the near dead that

the hospital is a fantasy place. You walk around in the medical castle as king. It is also at night when the operation is over and the formerly sterile drapes are soiled with blood and all sorts of body fluids that the hospital is a tomb and filled with silence.

Hospitals may be just brick and steel, but they house a part of all of us. They don't die or retire but live long after all the rooms are empty.

Remembering Dad — and all the other soldiers

In the Ken Burns' PBS documentary, "The War," it said a thousand World War II veterans die every day. My dad was one of those soldiers. His day just happened to be 30 years ago when he died prematurely from a heart attack. On Dec. 7, 1941, the Sunday of Pearl Harbor, my father was 33 years old. He had once been stationed in the Hawaii Territory at Schofield Barracks but had been rotated back to California before the killing started. Not a young man any longer, he was still a boy from a small town in Nebraska. He had left the Great Plains orphaned to seek his fortune during the Great Depression. Somehow he ended up in the U.S. Army, although he never was a real military man.

When comrades were slugging it out with the enemy on two continents, he was stationed at Fort Douglas, Utah, far from the Presidio of San Francisco and far from any sea threats from Japan. He would say that he fought the war of the Wasatch.

His weapon during the conflict was not a carbine but a typewriter and probably a lot of pencils. He was a financial clerk with the 9th Service Command Headquarters in their counterintelligence unit. He was never a spy, but he said that he knew secrets he never shared, even though there were times when he would have loved to shout them out from a hilltop. His only admission was as a money-numbers guy he did remember dollars going to something called the Manhattan Project.

He was finally transferred with his family to the battle zone of Okinawa some eight years after the shooting had stopped. As

children, we saw the ruins of Shuri Castle, not knowing about the carnage of Operation Iceberg, code name for the invasion of the island. He took us to see where the soldier's friend, Ernie Pyle, was initially buried. The war correspondent was killed in the last battle of the war reporting about ordinary soldiers. My dad probably thought he was pretty ordinary. I remember him telling my brother and me about suicide cliff, where Japanese women and children had leaped to their deaths rather than be captured by the devil Americans. However, the only actual remnant of war we experienced was an undetonated bomb lifted up from its own rusted grave in downtown Naha.

After his medical discharge for heart problems, like so many other vets, he moved to the Sunbelt. Just like he wasn't a warrior, he wasn't a farmer, either, and the sun just suited him fine. There weren't any stories of heroism or valor. But we made up our own with the barrel of old Army shirts, belts and a real helmet and steep pot. He didn't attend any meetings of the American Legion or Veterans of Foreign Wars. There were never any reunions for financial clerks, but he visited a friend from those days, Muzzy, as if he were a brother.

Dad never said we had to be soldiers, but we flew the stars and stripes every day. He also managed the local Boy Scout troop in its fund-raising of planting American flags along Main Street businesses. He loved his country even though he hadn't shed any blood, though he probably knew a lot who had.

This week as our family watched the series on television about the ultimate sacrifice of so many — not just the fighters but everyone — it made me think about my dad and his far too early death, not from bullets but from coronary heart disease, obesity and hypertension. It made me wonder; if we can be victorious over foreign evil, why can't we defeat the foes of our own making? We mobilized a nation but can't get health

insurance for all. We vanquished whole armies but can't agree on caring for our own citizens. There were generals galore, but no one leads us now. We certainly won the war but lost the peace to better health care.

Today's young people are wired and worried

Meet Generation W — "w" for wired and worried. Every day in my office kids come in worried. Now the easy response is, "Who wouldn't be worried in the presence of the shot doctor?" Others will blurt, "It's a phase" or something along that line.

No, these are children who are petrified to sleep or be alone, scared of going off to school, frightened to leave the house, intimidated by the wind or all other sorts of everyday situations that have become stresses. The problem is that the fears may go away but not the fear.

In today's childhood there is not only an overabundance of stimulation, there is a shortage of soothers. The net result is the big W. In generations past, the human creature had places of solace. They could down-regulate their brains. In an agrarian society, children would be sent to the lower 40 to herd the sheep or gather the cows. There were places without man-made sounds. Now the noise from an iPod drowns out the sounds of the grass growing. I know because I don't rough it. Maybe that is why I'm uptight, bite my nails and can't be without my wireless Internet.

In his book, "Last Child in the Woods," Robert Louv writes, "Given a chance, a child will bring confusion of the world to the woods, wash it in the creek, turn it over to see what lives on the unseen side of that confusion." He further describes the condition of "nature deficit." Perhaps as a physician I should prescribe fewer pills and hand out more pine cones, or give doctor's orders for hiking.

There is little rest from this excessive stimulation. On vacations, children have their portable devices or the van is packaged with the latest DVD screens. Don't watch the scenery or see the sites or you will miss the 10th playing of the show du jour. In a recent family trip to the mountains, we were without tents but not our Nintendos.

In this whirlwind of wires and wireless, there are four steps to wind down the worried.

First: decrease the chaos and increase the calm. Turn off the TV, pull the plug on video games and hide the batteries of whatever makes noise or flashes. Do less in more time. Get up for breakfast and sit down for dinner. Go for walks. Look at the stars. Go into the woods. Don't let your child be the last one.

Second: Watch for the signals of distress in you and your children. The ability to pick up on the sometimes subtle signals increases with practice. Name the emotion. Look at your children's hands. If they bite their nails, crack their knuckles, pick their skin, bounce their legs or tap their fingers, they are expressing their excessive mental energy. They — and you — may be stressing. Look for the agitation.

Third: Provide security. Once you see your child is excessively energized, help them calm down. Talk softly. Stop what you are doing and pay attention. Touch them. Sit near them. Provide comfort. Listen. Do the same for yourself.

Fourth: Teach a skill. For a child — and anyone else — the lesson is this: When you feel this way there are things you can do. Talk, go play, sing, reconstruct and correct distorted thinking. Serve someone, seek spiritual havens, take deep breaths, eat right. Go exercise.

Being worried and wound up all the time extracts a huge burden on the human body. The whole system is affected. We just sometimes miss the signs because we are "amusing ourselves to death." Maybe if we did it right this could be the Generation W for "woods." And when they turn over the confusion in the creek, they discover "wow." Or even "wonder."

In disciplining children, remember they are disciples

At the 1-year old "well child" care visit, I will often talk to parents about discipline. The biggest misconception is thinking discipline means punishment. Instead discipline comes from the Latin "disciplinar," "to teach or to educate." To punish, spank, ground, put in "time out," be angry, lose temper, "go to your room" are definitely different Latin words and are not even nice foreign sounds.

The word "disciple" obviously comes from the same ancient root. One envisions master teachers so profound in wisdom and knowledge that grown men and women, disciples, would leave their nets and looms to come follow. Our children are ready-made disciples. If we believe a child is our disciple, not just our kid, our whole interaction would change in style and tone. When we scold or chastise a child, imagine we are their master teachers, and they sit at our feet learning daily from us.

Once when our oldest child was about 5, I had become upset about something he had done. In the "discipline," I probably hadn't treated him like a disciple. Through his tears I tried to explain I was just trying to teach him something. In years beyond his age, he stammered through his sobs, "You only taught me how to be mean." Sometimes, unfortunately, if we don't treat them like disciples in our flawed efforts to teach meaning, our children will only remember the mean.

Some parents believe they have been given a dominion over their children. Stewardship is another word for dominion. It is a position of temporary custodial responsibility. We don't own our

children; they are only "guests in our homes." Anger and unrighteous dominion often go together. There is an important cycle to remember. When we think we are unloved or incompetent, we feel hurt. When we are hurt, we get angry. When we are angry, we feel empowered. When we feel empowered, we exercise control. And when we control, we artificially feel competent. You will do what I say or else. The intent then is when you find yourself angry, think hard about what is making you feel incompetent or unloved. It is not your child; it is something else much deeper inside.

Another time, our youngest was my teacher. I wanted him to get ready for bed. As a physician, I prescribed that we say our prayers and read a story. "No, I want to read a story first." I became provoked. I felt incompetent as a father. My 3-year-old would not do what I said in the order I wanted. M.D. at that moment meant "Mean Dad." Fortunately, I repented and was the disciple this time and sat at his feet. I was most definitely sweating the small stuff and needed seriously to re-examine my notions of what is a father.

Because discipline means to teach, I would suggest that parents create a three-column list with the headings: What do I want to teach? How do they learn? And how do I teach disobedience?

First, think about what you want to teach. Of course, you want to teach love and kindness, but you also want them to respect and, with this, obey. You will want to teach them that the world is an interesting and exciting place. You want them to explore and discover the wonders around them. But you don't want them to eat the dog food. You want to show them how big and bright and shining is a car, but they also need to learn that it can run over them. Their temperament and your personality show through as you draw up your list. If you are a worrier and

they are a wanderer, your restrictions must balance their curiosity, not crush it.

In the middle column, think about how we humans learn. Our brains learn or remember through creating new neural connections. There is protein synthesis and new synapses. The brain expands and molds to the new lessons. But this takes time and good nutrition to grow. We also learn by observing. There are neurons within the brain called "mirror cells," which are activated. They fire as they watch, as though they are doing the action themselves. As the individual performs the same activity, these cells will join in with the motor cells and the coordination centers to become part of the person. That is why actions speak louder than words. We learn better with a variety of sensory input.

If you talk, touch. If you touch, have them look. Let them taste and smell, especially chocolate chip cookies. We also learn with just the right touch of tension, but too much prevents concentration and focus. Lastly, as complex beings with agency, the probability that we will do something is increased with attractors, meaning positive incentives, not negative threats.

Tough tests of courage come in many forms

Courage is not simply one of the virtues, but the form of every virtue at the testing point. — C.S. Lewis

True courage is a rarity. It is still found on fields of battle but sadly less on the plains of politics. But this week I saw it in a 12-year-old boy. It was not war, though he was wounded. It was not a physical struggle, but he did want to fight. It was not a race, but he wanted to run. He was a young man truly petrified of needles, in the office for junior high shots. Those who don't flinch at the sight of a syringe may be tempted to dismiss or mock such a scene. But trust me, he was near panic and in as much anguish as anyone I have seen. For him the testing point was getting ordinary immunizations.

It could be argued that no one in their right mind should like shots.

Yet, injections are a daily curse and life-saving blessing to the hundreds of thousands in need of medicines that cannot enter the body in any other way. They deliver growth hormone to those without, interferon to combat various immune disorders, insulin to diabetics, antibiotics to treat serious infections, pain relief beyond the reaches of oral doses and, of course, immunizations. They can also pathetically promote the highs of heroin or the buzz of meth.

For this young man, needles represented every tragic memory of his father with AIDS, his dad's drug dependency, and his existence in prison. This is perhaps why the pain of the thin

needle was magnified a billion times. It is not the stick; it is the sting of the past and the hurt of his childhood.

In his turmoil he was like a caged animal. He couldn't sit, and he wouldn't stand. He didn't want to be held by his mother, but he didn't want to be left alone. He literally backed into a corner; he stiffened; he refused closing his eyes like a condemned prisoner rejecting a blindfold.

We talked about how he needed to slow his breathing and count in and out. We tried teaching about what his body and brain were doing to increase his fear as a form of lying and distortion of the truth. His mother explained how he was magnifying and personalizing the whole thing. We spoke about choices, not of the immunizations but of how he felt and acted. We coached him to imagine something distracting or pleasurable, being in a different place.

In the end I don't know if any of those efforts made any impact at all. He wanted me to give the shot. I stood by him and embraced him and gave the first, then the second injection. He did not move, scream, cry out or resist. He did it. He passed the test of courage.

When one sees and experiences his profound agony and ultimate victory, it gives pause and poses the question to the grown-ups in the room and out. Are we half as brave with the fears and dreads in our lives? Sure, one may not become as physically ill with shots, but then again a lot of us run away from other tests of our virtues. Some struggle with the virtue of joy when they are depressed. Courage could be the virtue of humility by losing weight when there is a fear of losing excuses or personal identity along with the poundage. There is a certain special kind of courageous virtue in being as good as you can be when there is self-doubt and disabling feelings of

inadequacy. One parent's contest of strength was the virtuous compassion to her children, neutralizing the brutality of her own parents.

Seeing my young hero made me realize the potential of courage in all of us. But like him it means we must exercise our various virtues at our own daily testing points.

If it were your 'last lecture,' what would you want to say?

At Carnegie Mellon University recently, a professor of computer science and a world expert on virtual reality gave his last lecture. The rules of the talk would be to ask a faculty member to give a presentation as if it were the final class of his or her life. The objective was contemplation of the most important last words the learned teacher would give to his students. What message would be the ongoing living legacy of the scholar to others that would last beyond the years?

For most speakers it is an interesting intellectual exercise. For Dr. Randy Pausch, it's real. This scientist, creator, lecturer, role model, mentor, husband and dad is dying from metastatic pancreatic cancer. Pausch, a father of three, gave his "last lecture" a month before his 46th birthday. Since then his heroic presentation (www.cs.cmu.edu/~pausch) has spread via the medium he has personally advanced in the science of computers. I encourage all to learn from it. It has made me wonder what would be the last lecture I would give to the parents who bring their children to me as their pediatrician.

Part of the challenge of such a task is that doctors don't spend a lot of time with patients these days. The world of insurance reimbursement is heavily weighted toward doing things, not feeling or sharing things. So the last message in medicine has to fit into the scheduled 10-minute office visit.

Of course, it would be impossible to include everything. The message would vary for different parents and children of different ages with their different medical and emotional needs. Perhaps there could be some fudging like, "this is important so I will tell you, but it is not really my last message." In that group would be to eat right with more omega 3, iron for children and pregnant and nursing mothers. That goes along with increased day-to-day activity and regular exercise. I would tell teenagers to love their mothers and fathers and "If mama ain't happy; nobody's happy."

Then there would be the speech about "Garbage in, garbage out" in relationship to brains, children and TV, movies, computer time and video games. It is still bewildering to me the number of parents who are totally oblivious of the harm audio-visual trash does to a child's growing absorbing brain.

After that, it would be a paragraph thrown in on getting the right vaccines for your children, wearing seat belts, slowing down your driving and putting away distracting things like cell phones. And for heaven's sake, don't drink and drive.

I would emphasize not smoking. Don't start, and stop if you already have.

All of this would be just the introduction of the last thoughts. Then the hard work starts. What to say. But more to the point, how to say it so others understand. It wouldn't even be original. I would say:

Know yourself. Know you are loved and have intrinsic worth. Fear is the ultimate enemy of good. Promote security for yourself and for your children by creating a peaceful environment. Identify their needs and distresses, provide comfort and teach a skill of success. Name your emotions and those of your children

and loved ones in order to be better schooled and practiced at responding appropriately to their fears and also your own.

That's it.

Pausch doesn't have that choice. Instead he left a message of encouragement for those he is leaving behind. For the rest of us, we should think what we want to say in 10 minutes; then act like we are going to live forever.

We're a sorry lot to think we must apologize so often

We are a pretty sorry lot. I mean, a lot of us go around saying we are sorry — a lot. Running late in my clinic, as I seem to invariably do, I recently burst into an exam room. The mother, in her effort to keep her sick, tired and bored child entertained, had her up at the sink playing in the water. It was actually a pretty delightful scene. Except, as I rushed in, the mother apologized to me.

I was the one who was late and de facto rude for making her stay cooped up in a small room with a toddler. Yet, "I'm sorry" was the first thing out of her mouth.

It came from her so fast and instinctively, it must have been rehearsed hundreds if not thousands of times: "I'm sorry." It was not a statement of manners, because I was at fault. Instead, it was more like a reflexive act of self-defense. If one seeks forgiveness first, the beating wouldn't be as severe.

I don't doubt her sincerity, but it made me wonder about her upbringing. From our beginning we learn, in the millions of exchanges between child and parent, how to survive. Humans exist as social creatures. We learn how to behave from others. We watch. We act. Our parents react. They send messages. We receive and decipher the code.

This constant rehearsal molds us into who we become. We are what the millions of moments teach us to be.

The theme of these minute-by-minute tutorials is always the same: How to stay alive and safe in a cold, cruel world. We

learn about relationships, for it is in the relationship between mother and child that we are secure physically and emotionally. Initially, security is all about proximity. Being close is safe; being far away is dangerous. Just look around at any mother child dyad in nature and you will see the same need to be close in times of distress. Yet there is an exception. If the mother is emotionally overwhelmed or was taught to be insecure avoidant, the child instinctively learns there is a defined distance of proximity between the two. Too close and the mother becomes uncomfortable, thereby defining the tolerable emotional distance. Children become like satellites in geosynchronous orbit. They are fixed in space at a set distance from Earth in order to be in constant communication. So to be close, the child has to be far away. Sensing the parental distress, kids are taught manners very early.

In this dance of intimacy, a child learns to apologize to be close. For every fear, the child has to seek permission to be comforted. One step forward by the child prompts a mirrored one step backward by the parent. It is not for meanness on the part of the parent; it is just that they were taught this style of stress management by their parents going back generations. Nor is the parent evil. Backing up is how to protect against being swept away. It is emotional survival by absenteeism.

Just picture a child wanting and needing emotional connection. Now think about this grown adult with the same cravings having to be submissive, head bowed, eyes down, always apologizing — even when all they are doing is playing with their child in the water. So if you find yourself on the defensive for everything, stop and tell yourself, "I am OK." "It is not my fault." "I forgive whomever has stepped away from me because I understand they may not have been aware of it and probably knew nothing else." "I will learn, and I will teach others

how to be closer one inch at a time."

Oh, and I won't say, "Mother, may I?"

Doctor's message complex mix of words, emotions

Let's suppose for a moment that you are a physician, a medical doctor. You have trained for the prerequisite 11 years in school and residency. Let's say you are in primary care, an internist or a family physician. You have been in practice for a couple of years or many; it isn't important. The setting could be your office or a hospital where you impart to your patients your knowledge and therapies.

Now let's further say that you are caring for a person who is dying. Of course the condition killing your patient would be significant, because with diagnosis comes options for treatment — even for the dying. Furthermore, this person comes to you for your clinical acumen and skills that will provide those options. However, in such a situation, what overshadows your schooling is who you are as a person and who the patient is.

The message, both in words and deeds, may be different if the patient has been a lifelong friend versus an assigned John Doe in bed 3A. There would be an expected difference if the patient had been afflicted with the infirmity for a long time versus an acute event or a freak accident. How would you explain death to a child with a terminal cancer? The age and accompanying complications would change the conversation. If an infant is born at an extreme, premature date with no chance of survival or with multiple congenital defects, the message would perhaps be more easily spoken, even a relief in the hopeless situation. Still it is unnatural for a parent to bury a child. The natural time continuum is broken by being thrown into

reverse.

What would you say differently to a wife or a husband, to a daughter or son? Would you talk about a good life lived and a better place, or should you just describe the medical or surgical actions? Most families want to know that all is being done to minimize their loved one's pain. But could you talk about their pain? When they want you to foretell the time of passing in months or days there will be a feeling of helplessness; not only because you can't predict, but because it is a mark that you have, in a way, failed.

The words that you would use to describe your patient's condition will be generated in the left hemisphere speech center. That side of the brain is the logical half. It will provide the facts and the figures. However, the tone would come from the right hemisphere of emotions. Therefore, the question becomes not only what you would say but how you would say it.

What will be the emotional message you will tag onto the words you intellectually choose to speak?

How much fear will be in your voice as you contemplate your own mortality — especially if the patient is a few years younger or the age and appearance of your daughter?

How much serenity will be part of the script? Can it be infused into another like an IV?

Will the emotion of sorrow or hope be part of both the spoken sentence and the shared sensation, or is that unprofessional? If your belief is that death is the final act, should you transmit that opinion to your patient?

Anciently, doctors were physician-priests with death often the only cure. Perhaps in their uneducated double role they knew what to say and how to say it because they believed. Today, doctors know a lot more about the process of dying but less about death itself. There are a lot of questions. And we still may not get the ending right.

Is autism more common now, or does it just seem so?

Autism is a soul piercing word. Just the sound of it stops the heart. In pediatrics our lexicon is usually generously sprinkled with words like cute or cuddly, and autism is not part of the speech center that we like to use. We deal mostly with happy mothers and smiling babies, but that seems to be changing. Sadly, autism has become more a part of our vocabulary as we all become better acquainted with a neighbor's boy with the diagnosis or a cousin's child you knew wasn't quite right.

There is a very important debate about autism. Is it more common today than before? This is critical, because if autism is growing in numbers, it implies a cause or causes are also multiplying. The thought that something is out there affecting our children and our children's children's brains is pretty frightening. It also implies a strategy for prevention. If a medical condition is static, this year there will be, let's say, 100, and 100 years ago there were also 100 in the same population. It is fixed, and the environment that has changed over time seems not to have any influence on whether a person gets it or not. Then the etiology, or what causes the disease, is also something stable, probably in our genes. But if a century ago there were 100 and today there are 100,000 in the same group, then it is easier to see that this something is not in our genes but perhaps our water or air or food or the way we treat children, or who knows what. Therefore, it is critical to understand if autism is more common or not.

Establishing how often a diseases attacks its victims is not as easy as it seems. It is no simple matter to know what is autism and who has it and is that number greater today than five or 10

or 100 years ago.

The first problem is just knowing what is autism. It has a list of three domains where the brain seems to be broken. They are communications, socialization and use of objects and symbols. Yet unlike the absolute counting of dead or alive, there is a huge range of severity. What to count involves severity as recorded by different people, timing of diagnosis in light of normal developmental changes, interventions along the way, definitions of normal variations etc. It is never just a simple 1, 2, 3.

Another challenge to know how often a disease is showing up in the community is that the definitions may change. In times past, the behaviors seen in a child with autism would be called mental retardation. So are there more children with autism or fewer kids with mental disabilities? Clinical skills in applying the criteria also make a big impact. A doctor, like anyone else, sees what they know. If I only know about childhood schizophrenia, I might see certain characteristics of that in autistic children, or if I don't know something, I may not give it any name at all.

Perceptions change because our awareness increases with information. If Newsweek or Oprah Winfrey has tearful parents recounting their story, the next week others will step forward and say they now know what has been Johnny's problem all along. Johnny hasn't changed, only our perception has.

What is frustrating for me and a million times more so for parents of children with autism is that the argument continues. I, for one, believe it is more common. We need to think and study the many factors that could be making an assault on the developing brain. I don't like saying "autism" to a parent. I would much rather say, "Let's do this and prevent it, and by the way, your baby is cute and cuddly."

Being 'wrong' is a complex situation, especially for doctors

If you hate being wrong, imagine how I feel. I dislike being wrong 100 times worse. If I mess up, not only do I look bad, I worry I'm going to hurt someone. There are at least three different ways doctors get it wrong. There is the "I don't know," the "I think I know but I really don't" and finally the "I know because they told me, and they were wrong."

This last one is where initial medical thinking says stuff like, "You should take hormonal replacement therapy for your menopausal symptoms" only to discover that was not such a good idea after all. Medicine's bad.

Research science take-backs and medical mulligans happen all the time. Medical discoveries, like archaeology, unearth new "truths" all the time, only to find a few layers of dirt further down that the first conclusions were wrong. One of the most infamous was the fairly indelicate surgical approach to mental illness, the frontal lobotomy. Adding to the blunder, Antonio Moniz won the Nobel Prize in 1949 for medicine for his discovery of the therapeutic value of leucotomy in certain psychoses. In retrospect, it could be said that the judges were either so eager to assist the sick of mind they were blinded by the truth, or they themselves had volunteered for the procedure. Today billions of dollars are awarded when much-heralded therapies go awry. Vioxx was the poster child of a new class of medicines until a few people started dropping dead while taking the drug. Talk

about a tough pill to swallow.

In retrospect, if I were a doctor prescribing this former wonder drug, I would have been wrong. But that counts as one of those "I was wrong, but so was everyone else." Unfortunately, that is only slight conciliation when you are telling the family the treatment was a success but the patient died.

The other wrong that I personally dread — because it is so obvious — is the plain "I don't know." It happens all the time, but it is especially hard when I believe that, as a doctor, I am supposed to know everything. My partner had a patient with a pretty awful looking rash. It was the kind of skin reaction that wasn't going to kill the kid, but not knowing what it was, I could only suggest to the mother that she dress him in long sleeves, turtleneck and ski mask. I just stared at the big red splotches and spots and had no clue. I could think what it wasn't, but what it was escaped me. I hate that. If I am supposed to know everything, then not knowing something completely destroys any fragment of professional confidence. Sure, there are specialists and really smart doctors we can call upon for their help, but not knowing adds insult to me and injury to the patient. When people pray for "the sick and the inflicted," the latter is me when I can't diagnose the former.

It is the last category of "wrong" that is the most worrisome for me and should be for the rest of us — the "I am wrong but don't know it" mistake. It is a daily risk for physicians who try to stay current with the science and human complexity. One variation of this "I don't know" is no one person can swallow the stream from the fire hose pumping out new information through thousands of medical journals. But there is also a "prideful ignorance" that inhibits learning. When one doesn't know and doesn't need to know anything different, there is a danger that exceeds humble ignorance. Not knowing and then acting like

one really does conceals all outward appearance of doubt, eliminating the intuitive checks the patients have to protect themselves. And it precludes the arrogant clinician from using information tools and clinical guidelines.

Knowing I don't know helps me learn. It is also a reminder how scary it is to be a doctor and a patient. However, by combining our mutual hatred of being wrong with my sheer panic of being wrong on your behalf, hopefully it will help us all get it right.

Teaching children to work is a job for all of us

Teaching children to work is hard labor for parents. In the good old days it was easy. Families lived on farms; farms made work necessary. Teaching labor came naturally. The cows had to be milked, eggs gathered and the wheat harvested. There was no discussion, negotiations, pleading or bribes. The reward was the cows were milked, the eggs were gathered and the wheat was harvested. Work was what children and adults did.

Today, in my clinic especially, I ask adolescents if they have chores around the house. The next question is: "Do you do them?" In contrast to the agrarian life, the only job of some modern kids around the house is cleaning up their rooms. Before there was the Sunday best and then maybe another pair of work clothes. Since most American kids have more clothes than an orphanage in Chad, picking up their designer jeans is a chore. But it is not the same.

Our children are growing overweight often because of a lack of work. They are not active enough to support all of their caloric intake. Lifting their Big Gulps and chewing their super-size burgers are their only exercise. It was hard work to pick up a bale of hay. Lifting a T-shirt off the pile on the floor just doesn't burn the same amount of fat.

In the past, you couldn't just milk half the herd or half a cow. The work continued until the job was done. Finishing the assignment was inherent to the task. Now you just save your homework on the hard disk for another day or ask for an extension. Turning in a homework project late is no big deal. Our attention span is

limited to the three-minute MP3 song or the 30-second TV commercial instead of thinking in seasons and cycles of nature.

There is also often a disjunction between work and family, whereas the farm was the family's occupation. True, excess children were sent off to the distant relatives, both in blood and distance, to learn a trade, but it was for the family. The children worked side by side with their parents. The daughters and the mothers were in the kitchen, and fathers and sons were in the fields. Too often I would just tell my sons to go mow the lawn instead of saying come mow the lawn with me. It is a parenting style that probably comes from our own history. Growing up in hot Arizona we were told to go mow the Bermuda grass. In my independent phase I scrolled "no" in my best cursive in the tall stalks of seeds. It was erased row after row when my father arrived. We have "Take your daughter to work day," but that is a cutesy, ineffective one-day attempt to teach our children what we do while we are gone. On a farm there was no question.

Different parents try different techniques to teach children to work. Some have lists attached to a clipboard. Some will create jobs around the house such as putting the plates in the dishwasher or taking out the garbage. But they are all very short lessons. Perhaps instead of making up play jobs, the family could perform service to others and the community as a worthy substitute.

Picking up litter around town or along a roadway could augment the meager work of picking clothes off the bed. Tending to children in homeless shelters could substitute for the genuine need of caring for the lambs and the ewes. Perhaps tutoring immigrants in English or cultural lessons could be the labor of love that replaces tilling and cultivating the soil. Serving the widow and tending to her needs could be the replacement

for sewing the shirts and mending the socks.

Teaching the next generation to work is a job for all of us. We don't have family farms anymore, but there are plenty of work sites. We just need to be the laborers with our kids.

Procrastination can become a harmful disorder

*Down to defeat is the destination
of all those who practice procrastination.*

— Lew W.M. Cramer, my dad

No wonder I feel like a loser so many times. For me there is nothing I can't put off tomorrow I have already put off today. Procrastination is a very common ailment. It's not quite a disease, but if exercised too often it can become a kind of disorder. Procrastinating is avoidance, a biological response to increased tension. It is more common and more intense in people with increased worry or nervousness. It is also a problem-solving style learned from infancy. Like any group of fans who support perennial losers (say, the Chicago Cubs) the favorite mantra of procrastinators is "There's always next year."

The problem is that in so many endeavors outside of the pennant race, there is no guarantee of a second chance. Time is linear and keeps going forward, flying past a lot of moments of personal victory.

Avoidance is another "flee phenomenon" of managing perceived threats. Our body has limited options to handle an onrushing bear. We can flee, or as the joke goes, "I only have to outrun you, not the bear." We can stay and fight with whatever weapon is on hand. (I personally would prefer a large-caliber gun), or we could freeze — "Don't move and he won't see us!"

We are probably predisposed by temperament on a favorite form of escape. Infants, very early on, can be shown to be "approachers" and "withdrawers." Those with the predisposition

to approach look ahead and deal with new things with greater ease. People with withdrawal turn away. They are more sensitive to the world around them. It isn't bad, just a difference. These behaviors display how the brain regulates energy and processes the information of potential harm. If the face, food or setting is interpreted as a threat too great to cope with, then the child will avoid for self-protection. It is as if the child's body says, "Quick, run, hide" all the time.

Avoidance is also a result of a parenting style. A child is taught, over the millions of minutes of infancy, that when there is a crisis and fear is the emotion, running away is the best solution. It is taught by repeatedly experiencing stress without a matching parental response of calm. There is learned external quieting but little internal calm. As the tension goes up, the habit becomes to deal with it by escape. This may not be actual physical running but a failure to deal with the tension.

Procrastination also has an addictive profile, much like cocaine. The drug causes a surge of pleasure with a resulting crushing low, enforcing the need to do it again and again to avoid the agony. While not illegal or as enslaving, postponing builds the tension more and more until something has to be done or the crisis passes on its own. If we finally act, the release of tension is enormous — much like a drug-induced high. The crash comes when our performance is suboptimal or the excuses and self-criticism come in waves of "If only I had" or "I should have done better" or "If only I had more time." There is tension, release, then pain.

Treating procrastination means overcoming internal tension and worry and vanquishing childhood traditions of managing stress by running away. Therefore, know your fears. Naming them helps deal with them. Skip the stressors you can. Act before the tension is too high. Have a visible written plan or list to do.

Commit with others for help. Hold hands. Do simple things, then celebrate and provide huge emotional rewards to yourself for doing something small now. If anxiety is up, bring it down. Don't beat yourself afterward if you happen to delay.

My dad was right, but his saying needs more verses:

"Down with fear" is the obligation for all those who crush procrastination.

"Up with courage" is the destination of all those who defeat procrastination.