

Abraham Verghese

# Bedside Manners

I was taught to tap and thump my patients and listen for the sounds of sickness and health. But this is fast becoming a lost art, and that's bad for everyone.



When it was time to hang pictures in our new house in San Antonio, my wife asked me to buy a stud finder. As a husband I demurred; as an internist I flat-out refused. We internists make it our business to divine the stutters and stumbles of lungs, hearts, brains, adrenals, guts, gonads—hence the term “internal medicine.” Once upon a time, doctors examined patients not with CAT scans or MRIs but with their senses. “Surely,” I said, “skills that can find pus behind the chest wall can find a stud behind drywall.”<sup>¶</sup> Under her skeptical eye, I dragged my fingertips along the wallpaper. I flattened my palm and tapped on the back of my left middle finger using the tip of my right middle finger. My hands drummed over the pressed gypsum, sounding it, discovering the spots where the resonance became muffled, abbreviated—*thud* rather than *thoom*. In the medical world, this is known as percussion, a technique that physicians have employed for centuries to sound the body’s depths. Using it, I had found the upright wooden timbers that even in the best circles of society are called studs. My brother-in-law, who fought in Korea, who wears ten-gallon hats, and who is fond of me but feels that most medical professionals are in it for the luxury cars, golf, exotic vacations, and early retirement, was impressed. As we hammered the nails in and hung the pictures, he said, “I didn’t think a doctor could do that anymore.”<sup>¶</sup> My wife thinks of me as a Luddite. She believes that if a gadget has found its way onto a catalog page and if its price is many multiples of a

DOCTOR WITHOUT BORDERS: Abraham Verghese photographed at the University of Texas Health Science Center, in San Antonio.

bar of soap, it must be useful. But that evening the pendulum swung in my favor. It was one of those man-puts-machines-to-pasture moments where the sheeplike drift of consumer society toward another “must have” is momentarily halted. Please, I beg you, say no to pet dishes on legs that enable Fido to drink in an “anatomically correct” fashion, say no to battery-operated fridge air purifiers, and say no to stud finders. I fell asleep that night thinking about an instructional pamphlet that I would put in every homeowner’s Welcome Wagon basket, alongside the coupons, refrigerator magnets, and recipes for orange-peel-flavored scones: “Find the Hidden Stud in Your New Texas Home.”

The sad thing is that a homeowner armed with such a pamphlet and with one other critical ingredient—faith—can soon become more skilled at percussion than the average physician. It is fast becoming a lost art. In the past 25 years, I have taught hundreds of medical students the four classic steps in the physical examination—inspect, palpate, percuss, and auscultate. Their eyes sparkle. This is the way they imagined themselves: semioticians at the bedside, reading the signs to find the varmint in the patient’s body. Alas, a shock awaits the students when they finally arrive on the wards in the third year of medical school, their pockets laden with reflex hammers, tuning forks, ophthalmoscopes, otoscopes, penlights, and stethoscopes, only to discover that the ebb and flow of the modern hospital centers on MRIs, CAT scans, echocardiograms, angiograms, and myriad lab tests. Often, interns and residents have so little faith in bedside diagnostic skills that, as one student told me, “a man with a missing finger must get an X-ray before anyone will believe he has only four.” As for neat pocket tools, only a few die-hards still carry them. The stethoscope alone peeks out of the doctor’s pocket as a hollow symbol of the profession. (I prefer seeing it in the pocket to seeing it draped over the neck like the beads and gris-gris of Wodaabe tribesmen of the Sahara, a vulgar display meant to signal that the wearer is a sound marriage prospect and has, if not cows and land, then the prospect of luxury cars, golf, exotic vacations, and early retirement.)

When I travel as a visiting professor to teaching hospitals, I have the distinct feeling that the patient in America is becoming invisible. She is unseen and unheard. She is “presented” to me by the intern and resident team in a conference room far away from where she lies. Her illness has been translated into binary signals stored in the computer. When I ask a question about her, the intern’s head instinctively turns to the computer screen, like a pitcher checking first base. I gently insist we go to the bedside, but that is often a place where the team is no longer at

ease. I realize what has happened: The patient in the bed is merely an icon for the real patient, who exists in the computer. How strange this is! When one knows how to look, the patient’s body is an illuminated manuscript. Indeed, in an elderly patient with a double-digit “problem list” that scrolls off the screen, only at the bedside does one understand which problem is most important. As my brother-in-law would put it, “You have to kick the tires.”

I am no economist, but even a landlubber on a sinking ship is entitled to make observations about the rent in the hull that is about to alter his fate: The present crisis in American

health care is only secondarily a fiscal one; the real crisis is that the “art” of bedside diagnosis at which a previous generation excelled has died with the next. Personal-injury lawyers allow us the wonderful excuse that we order batteries of tests because we are practicing “defensive” medicine. The truth is that even without the threat of malpractice, we would still need just as many CAT scans and echocardiograms as we do now. We know no other way. Take away our stud finders and we can’t hang a picture. We are like owners of playerless pianos asked to entertain during a blackout: Our fingers and ears may be intact, but we

can no longer play or percuss.

It was an innkeeper's son, Josef Leopold Auenbrugger, who discovered percussion. I have dreamed this scene so often that I am convinced it must have happened. Imagine Vienna in the eighteenth century:

*The inn is bustling. Young Josef and his father carry empty wine jugs down to the cellar. Auenbrugger père hums as he descends, the sound enlarging in the cool cavern, where three large casks of wine sit like three portly giants. Since the casks are not transparent, the question is always how much wine remains inside each one.*

*Auenbrugger père raps with his knuckles on the side of each cask. At the top he generates a hollow sound, a profundo, like a bass drum. As his knuckles come down the side, there is a point where the sound changes. The sustained echo—the thoom—is stifled, and the new sound is dull and flat, as if the old sound were decapitated. Young Josef, just like his father, “sees” through the cask, where the reflective, liquid surface ripples at his touch.*

In Auenbrugger's time, physicians focused largely on symptoms and had no great need to touch the patient (which some would argue is where we are now). Knowing what ailed you made little difference, because as far as treatment went, you could only be cupped, purged, scarified, or bled. Bleeding was to that era what

antibiotics are to ours: abundant and overused. At the barber-surgeon's establishment, you held on to a pole as he sliced you and collected your blood in a basin. While there, you could also get a tooth pulled, an abscess drained, and finish up with a shave and a haircut. The barber-surgeon was nothing if not versatile. At the end of the day, the barbers washed long strips of bandage and hung them outside to dry. Medical students are often surprised when I tell them that the familiar red-and-white barber's pole has its origins in bloodletting, with the stripes representing the bloody bandages and the ball on the top of the pole representing the basin. If you had a chance to live, these treatments might nevertheless do you in; if you were destined to die, they mercifully hastened the end.

When Auenbrugger became a physician, he started thumping and tapping on his patients and painstakingly cataloging the sounds of health and disease they produced. The book he wrote about this practice, *Inventum Novum*, published in 1761, had the impact on medicine that X-rays would have 150 years later. For the first time a doctor could “see” beneath the intact skin into the innards of the body. Percussion allowed (and still allows) a physician to get evidence of a dilated heart, an enlarged liver, fluid around the lung, fluid in the belly, a perforated stomach ulcer, and many other condi-

tions. I think of present-day ultrasound as the child of percussion, the ultrasound transducer generating a sound wave that bounces off the tissues and comes back to a sensor.

Like any new method, percussion had its overenthusiastic practitioners. The famous Pierre Piorry percussed while sitting on a high stool next to the patient's bed and then used colored crayons to outline the organs. Known as the “medical Paganini,” Piorry claimed each organ had its own note and the body held a musical scale. An apocryphal story has Piorry going to see the king and, on being told that the king was out, proceeding to percuss the chamber door and declare that the king was in.

I attended medical school on two continents. My first clinical professor in East Africa was a spiritual descendant of Auenbrugger's named Charles Leithead. He taught us how to place our fingers on the wrists of patients with rheumatic heart valve disease and recognize the slapping, “water hammer” pulse of a leaky aortic valve or the plateau pulse of a narrowed aortic valve (*pulsus parvus et tardus*). He marched us to the heart, taking the blood pressure along the way, studying the sinuous waveforms of the neck veins, which mirrored the happenings in the heart's upper chamber. He carefully inspected the patient's chest and felt for the thrust of the heart between the fifth and sixth ribs on the left, though

in an enlarged heart, the impulse could wander down and out to the armpit. At this point in an exam he had us pause and try to put the clues together. His teaching was “Before you pull out your stethoscope, you should know what you are going to hear.” It was heady, marvelous stuff. When I finally heard the soft, rumbling, low-pitched, mid-diastolic murmur of mitral valve narrowing that is caught only with the bell of the stethoscope lightly applied, I was ecstatic. I heard it because I knew it would be there.

Displaced from Africa by civil strife, I went to Madras, in south India, to finish my studies. My teacher was the legendary K. V. Thiruvengadam, known to all as KVT. KVT is the Ravi Shankar of percussion. He enjoined us to “percuss to feel and not to hear.” The vibration we received in the pleximeter finger laid flat against the chest was, he said, more important than the sound. You can recognize KVT’s progeny from our near-silent percussion; if I percuss audibly, it is only to teach, or to demonstrate, say, to a skeptical brother-in-law or spouse.

For sleuths of the caliber of Leithead or KVT, a diagnosis could be lurking in something as simple as a facial expression. Not the dull and coarse facies of a sluggish thyroid or the mask-like expression of Parkinson’s disease, which are evident to laypeople, but the *risus sardonius* (sardonic smile) of tetanus or the *facies*

*latrodectismica* (a grimacing, flushed, jaw-clenching, puffy-eyed expression) of a patient affected by the toxin from a black widow spider or the Madonna facies and transverse smile of a type of muscular dystrophy.

My final exam at the medical school in Madras included a rigorous clinical test with real patients carefully selected for signs and symptoms of a disease. In America, final-year medical students face no such clinical test. Even for specialists in internal medicine, testing with real patients and live examiners was done away with in the mid-seventies, after it was deemed too subjective. Recently, the powers that be put in place a national Clinical Skills Assessment Exam for final-year American medical students, for which the student has to cough up \$1,000 and travel to one of a couple of centers in the country. In my opinion and the opinion of many academics I talk to, this exam tests everything but clinical skills. It tests the student’s ability to make eye contact, to interact with a person *acting* the role of a patient, to follow the appropriate leads in his fictional story. Does it test whether the student can detect an enlarged liver? Or hear the diastolic sound of heart failure? To get a driver’s license or a pilot’s license, it is axiomatic that an examiner must watch you drive or fly to confirm you have the skill. Not so in medicine.

I recognize that I am an incurable roman-

tic. I teach bedside skills because I hear the ghosts of Auenbrugger, of the celebrated physician Sir William Osler, who took us out of the classrooms a century ago, and of the old horse-and-buggy doctors in South Texas who could divine their patients’ maladies by touch, smell, sight, and sound. I hear them say, “Thou shalt not break the chain.”

For the past few years in San Antonio, I have spent Wednesday afternoons on “professor’s rounds” with six or seven third-year medical students, seeing patients they have worked up. Each week, when I round with a new group, I ask them not to tell me or the other students what the patient’s diagnosis is, so that we can see how much the body alone might reveal. The students love these sessions. They often say that this is what they envisioned medicine would be about: time spent in the hallowed space around the patient’s bed, time spent with the patient, probing the body for clues. I preach that it is a skill they should cultivate, not to replace technology but to allow them to use technology judiciously and to ask better questions of the tests.

At a recent Wednesday afternoon session, our patient, an elderly veteran, was thrilled by the attention from the flock of students, particularly their percussing of his chest. “My doctor used to do that when I was a boy,” he said with a smile. “He sure knew what he was doing.” 🇺🇸