

# MIND TO MIND

*Creative writing that explores the abstract side  
of our profession and our lives*

*Carol Wiley Cassella, M.D., Editor*

## Burnout and the Relative Value of Dopamine

Carol Wiley Cassella, M.D.

*Welcome to Mind to Mind*

Medicine is often described as an art and a science. Each month, these pages will be set aside to share reflections from the artistic perspective. Mind-to-Mind is a place where researched footnotes matter less than emotional footprints and personal values matter more than statistical *P* values.

This inaugural Mind-to-Mind essay is devoted to the subject of burnout among physicians, a condition that afflicts more of us each year and brings with it significant emotional, logistical and economic consequences for the health care system.

It is my hope that the expository and creative writing shared in Mind-to-Mind will open a new conversation among us, building a stronger anesthesia community and, potentially, diffusing some of the many stresses that contribute to physician burnout.

I HAVE a theory about human beings. It is that, when given any leeway at all, we ultimately do what we want, not what we should. In fact, I so firmly believe this that I consider most excuses bald pretenses that fate and circumstance forced us into whatever predicament we are complaining about.

Okay, I know this isn't a blanket truth—and I'm a much more sympathetic person than I sound here, so I will parlay my theory into more scientifically based reasoning: dopamine rules. Dopamine ROCKS. I'd be willing to say that many of the problems facing our society today are the culprit of that tiny molecule worming its way into the pleasure receptors of our brains . . . and our craving for more of the stuff. Would we be in the middle of this foreclosure and debt crisis if it weren't so darn fun to buy a big fancy house? Another flat screen? And take the obesity epidemic—

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don't you think McDonald's knows that fat, sugar, and salt flush out more dopamine than broccoli?

Don't get me wrong—we have dopamine to thank for many splendid things: love, sex, and the sweet little babies that follow, an entire industry devoted to making perfect chocolate, and possibly the success of capitalism. So if I'm right, then the trick is to put enough dopamine-releasing pleasure into the important tasks of our lives to ensure that we *want* to do our best rather than slogging on through pure obligation. Kindergarten teachers know this. Casinos know this. Even dog trainers know this. But as I consider the deep roots of burnout in the medical profession, I wonder if those of us who should most respect this neurotransmitter have forgotten how to make good use of it.

When I graduated from medical school, I was committed to working in public health, to being a first-line physician who teased out the symptoms of illness and composed a plan to tackle whatever stood between my patient and a cure—be it economics, psychic trauma, or bad habits. I finished a residency in internal medicine and took a job with a clinic that served a large number of Seattle's immigrants and uninsured. Like many young women working in primary care, most of my patients were female, most had components of emotional distress that caused or clouded their complaints, and many needed pelvic exams, which took extra time. They all needed to talk and I wanted to listen. I enjoyed it. My patients were happy, or so their Christmas cards said. I was happy. I got lots of dopamine squirts—like the day a translator helped me figure out why a patient kept stuffing cotton in his ears, or the day the young girl who came back time after time with myriad complaints finally told me what was happening at home.

A year after I opened my practice, the clinic adopted a new system—something called “managed care.” We took classes in a whole new coding method, “relative value units,” or RVUs. My panel boomed as people were required to choose a managing physician and came to me, their newly assigned gatekeeper, needing referrals back to the cardiologists or psychiatrists they had been seeing for years. But my new role was to keep that gate closed. “Managing care” now meant writing letters to administrators justifying computed tomography scans, upper gastrointestinals, and nongeneric drugs. I spent hours at the end of the day dictating requests and rebuttals to denied requests. And at the end of each month, I was presented with a statement summing up how many patients I had seen (broken down to a decimal point) and ranked against my colleagues. I often wondered which mother, wife, or son had been split into some fraction. A lot of this wrenching change was critical as the era of endless medical spending crashed into finite limits . . . but it didn't come with a drop of dopamine.

One winter evening long after the secretaries and nurses had gone home, I walked through the dark waiting room toward my car and nearly jumped out of my skin when I heard someone crying. The woman waiting to see me had been in a car accident and, along with other injuries, her front teeth had been knocked loose. She'd spent days fighting the insurance company for dental coverage and now they had punted her to me, turned *me* into the last bad guy—the one to confirm that she would have to pony up the money to get her lovely smile back. Our office had been so busy on that cold gray afternoon that no one noticed her quietly crying in the corner when they turned out the lights and locked the door.

I have wondered if that was the moment some part of me decided I wanted to take care of one patient at a time and never know who insured them, if indeed they had insurance at all. The next summer, I started my anesthesia residency. I did not want to leave my patients, but I was suffocating inside that system. Somebody had pulled my dopamine plug.

Pinning down the causes and cures of burnout is a slippery business, which gives me all the more license to think my anecdotal experience and theories have some merit. But one point every study seems clear on is that burnout is increasing, and it is more common among younger physicians—those doctors temporally closest to the passions that drove them to go to medical school. So what is burning up their passion? Which end of the doctor-institution equation is sparking the fire? Do Gen X and the Millennials expect a lifestyle from medicine that only happens on television? Or have our hospitals and clinics become so burdened with cost-containment strategies, safety regulations, and the care of a medically complex, aging patient population that emotional exhaustion, depersonalization, and a lagging sense of personal accomplishment—the heralds of burnout—are inevitable?

I spoke with Charles Meredith, M.D., and Mick Oreskovich, M.D., at Washington Physicians Health Program (Seattle) about their experience treating burned-out physicians. I asked them to put aside the science and give me the gestalt of their experience. I still heard plenty of facts, which I had read in published studies. For example, after holding steady at about 8% for decades, the incidence of burnout among physicians started to climb in the 1990s. It now approaches 35% in practicing physicians with younger doctors disproportionately affected. In addition, more than 50% of medical students meet the criteria of the Maslach Burnout Inventory, the most commonly used survey to assess burnout.

But I also learned things I had neither read nor guessed. Namely, physicians in procedure-based specialties have a higher rate of burnout than those in primary care. And yet, more than 80% of surgery residents surveyed say they will go into a subspecialty,

hoping to land in a happier lifestyle. Fewer than half of practicing surgeons would recommend the career to their children; many would steer them away from medicine altogether. And more money isn't the answer: salaried physicians tend to be more satisfied with their work than more highly paid, fee-for-service physicians, even when their work hours are comparable.

When pressed for his subjective impression, Oreskovich faults the strains of health care reform for the rising rate of professional distress. As governmental dictates and ballooning costs force our medical system to change, physicians lose more and more professional autonomy—a factor strongly associated with job satisfaction. Younger doctors, he believes, seem to have less tolerance for environmental change than their older colleagues and thus may suffer more. But, if change is necessary for high-quality health care delivery to survive, what are the costs of rising rates of burnout in the doctors and nurses who provide that care? No one has data on this aspect of the health care reform movement, but those who study and treat burnout recognize it as a prodrome for depression and substance abuse, and a contributing factor to the higher-than-average rate of suicide among doctors. And consider the economic costs of high turnover and dropout, or the cost to rural communities as so many young doctors return to cities hoping for better jobs.

Peggy Sarjeant, M.D., a skilled and compassionate pediatrician, left medicine after 10 years in practice. In her poignant essay, “A Fire, Deliberately Set,” Sarjeant writes, “Burnout has become a universally understood and uniquely professional cliché, yet the term originated in the language of firefighters. A ‘burnout’ is defined as: ‘a fire deliberately set inside a control line for the purposes of consuming fuel between the edge of a wildfire and the control line.’ In the context of medical practice, the consumed ‘fuel’ stands for the physician; ‘wildfire,’ the patient, and ‘control line’ the constraints of the current health care system.”

When I left internal medicine to practice anesthesia, I was too inexperienced to foresee that the inexorable changes grinding me toward emotional exhaustion were not unique to my clinic or my specialty. How could I have? It was practically *rude* to talk about the cost of care when I was in medical school. But over the last 25 yr, each brimming with new medical devices, surgical toys, and pharmaceuticals, we have invented our way beyond sustainability. We cannot eternally afford to use all that we have discovered on every ailing body. The youngest generation of doctors will have to cope with the consequent ethical and economic dilemmas. Indeed, the concept of “relative value” may take on an uncomfortable new meaning.

Goal-driven, independently minded physicians may have to learn to find their dopamine jolts in the often overlooked mo-

ments: the suspicious patient who finally trusts, the patient who wakes up smiling and pain-free, the averted myocardial infarction, and the serendipitous discovery that the surgeon you've always disliked married your favorite high school coach. In the fact that the cafeteria makes great bread pudding, and your teenaged son actually told you what he and his friends did last night. For real.

If we were asked by Medicare to convert the bits and pieces of our day into relative value units, I wonder what value we would assign these moments compared to mastering computerized physician order entry or shaving 90 s off our average turnover time? Are *we* setting the mark for what we value as individuals, or adopting what we are asked to value and expecting the dopamine reward to follow?

I am now a novelist as well as an anesthesiologist, working part time in both careers. When my children ask me if I want them to become doctors, I have to tell them truthfully that I could not go back to doing that work full time. I found it too emotionally exhausting. But I can also tell them stories about people I have taken care of whose surgical outcome may have been better because I was there for them. I slowed down in the rush to turn over the room, fill out the forms, log onto the computer. I slowed down and listened. And then I acted in my own unique way, autonomous and personally gratified.

I closed my conversation with Oreskovich with requests for hope. What can burned-out physicians do to regain their desire to practice medicine? What can we do to stop the alarming increase in burnout? "The system isn't going to change," he answered. "The only thing that can change is you." But then he listed three actions that have been shown to make a measurable difference: meditation, promoting self-awareness, and—to my delighted surprise—shared reflective writing. Unfortunately, none of these actions would be assigned a single relative value unit by any insurance system. It is up to us, the practitioners, educators and administrators of medicine, to designate their worth and measure the units in physician-years-salvaged, with a bonus of happier patients and a healthier society.