of the necessary changes will be small and easily implemented, but others will require conceptual shifts in how we teach probabilistic reasoning through all stages of medical education.

Disclosure forms provided by the authors are available at NEJM.org.

From the Department of Epidemiology and Public Health, University of Maryland School of Medicine (K.E.G., D.J.M.), and the VA Maryland Healthcare System (D.J.M.) — both in Baltimore; the University of Maryland Institute for Health Computing, Bethesda (K.E.G.); and the Department of Medicine, Beth Israel Deaconess Medical Center, Boston (A.M.R.).

This article was published on August 5, 2023, at NEJM.org.

1. Adams R, Henry KE, Sridharan A, et al. Prospective, multi-site study of patient outcomes after implementation of the TREWS machine learning-based early warning system for sepsis. Nat Med 2022;28:1455-60.
2. Goodman KE, Morgan DJ, Hoffmann DE. Clinical algorithms, antidiscrimination laws, and medical device regulation. JAMA 2023;329:285-6.
3. Morgan DJ, Pineles L, Owczarzak J, et al. Accuracy of practitioner estimates of probability of diagnosis before and after testing. JAMA Intern Med 2021;181:747-55.
4. Bowen JL. Educational strategies to promote clinical diagnostic reasoning. N Engl J Med 2006;355:2217-25.
5. Goodman KE, Lessler J, Harris AD, Milstone AM, Tamma PD. A methodological comparison of risk scores versus decision trees for predicting drug-resistant infections: a case study using extended-spectrum beta-lactamase (ESBL) bacteremia. Infect Control Hosp Epidemiol 2019;40:400-7.

DOI: 10.1056/NEJMp2304839

Reading Kafka in the Hospital Cafeteria

Suzanne Koven, M.D.

The last patient I was scheduled to see on the last day of my 32 years as a primary care physician was an elderly woman who had ended each visit with me during the decades I'd cared for her by saying, "I love you, Doctor!" — to which I would reply, "I love you, too!" This affectionate exchange seemed to me the perfect finale to my clinical career, and I imagined it often in the weeks leading up to my retirement. It never happened. Four days before I was to see this patient and then hang up my stethoscope forever, I fell at home and shattered my right wrist. With one misstep, I was transformed from a doctor to a patient, my carefully planned departure hijacked by an abrupt and painful exit.

I had surgery to repair my radius and ulna and, due to a neurologic complication of the injury, spent the next several weeks in a world as quiet as my practice had been bustling. My chief preoccupations became pain, pain medication, and side effects of pain medication. I lost sleep and appetite and, requiring my husband to squeeze toothpaste onto my toothbrush and wrap my arm in a plastic garbage bag before putting me in the shower, some dignity.

One thing I had plenty of was time. When I was seeing patients, time had moved too quickly; I always ran behind. I had recurrent nightmares about charts piling up. Then, when records went paperless, my dreams did too, featuring screens of unpopulated templates. Now that I was a patient, time moved too slowly. Minutes seemed like hours — or became hours — as I waited for messages and phone calls to my doctors to be returned, waited for my next dose of pain medication, waited to be out of pain. To pass the time, I scrolled through social media and binge-watched television shows. When I tired of these, I turned to books. Not being an e-reader, I favored slim volumes I could hold easily in my nondominant, uninjured left hand.

One of these was Franz Kafka's 1915 novella *The Metamorphosis*. I'd read it many times, including once a few years earlier with the monthly reading group I facilitate at my hospital. The story concerns Gregor Samsa, a 27-year-old man, the sole support of his parents and teenage sister with whom he lives, who wakes one morning to find that he has turned into a giant insect. This tale has been read as an allegory of the psychological struggle of sons with fathers (Kafka's relationship with his own father was notoriously difficult), of the plight of the worker, and of antisemitism (Kafka was Jewish, and Jews have historically been depicted in antisemitic propaganda as vermin). It also has much to tell us about being a patient, as my colleagues and I found when we discussed

The Metamorphosis one evening several years ago in the small annex to the hospital cafeteria where we met until the Covid-19 pandemic exiled us to Zoom. Kafka seems to encourage this medical interpretation. The Samsa family lives across the street from a hospital, and when Gregor's sister Grete first enters his room on the morning of his metamorphosis, she does so "on tiptoe, as if she were visiting someone seriously ill."

Our group noted that Gregor's acute bodily change is not dissimilar to the experiences of people with an illness or injury — experiences that are more complex than most clinicians acknowledge or than any problem list can adequately convey. In addition to Gregor's pain, immobility, poor food intake, insomnia, and festering wound (after an apple hurled at him by his enraged father gets lodged in his carapace), Gregor suffers from anxiety about losing his job, shame about his poor hygiene, frustration at his inability to communicate, and many other trials. Gregor becomes the warped axis around which his family miserably revolves. Ultimately, they withdraw from him, refusing even to utter his name. When he dies, he appears to succumb not to disease but to despair, a mysterious phenomenon the clinicians in our group had witnessed many times.

Though the story is depressing, our group remarked on the comedy of certain scenes — the apple-throwing episode has a Marxian (Groucho, not Karl) quality — and on the optimistic note struck at the end of the book. The Samsas, no longer burdened by the repulsive bug-Gregor, travel by train with Grete, anticipating that soon her advantageous marriage will rescue them financially. As they prepare to leave the train, Grete's parents notice with delight that she's no longer a child, that she's "blossomed into a good-looking, shapely girl," a reassuring reminder that not all bodily transformations are undesirable.

But rereading *The Metamorphosis* this time, I struggled to find the humor in passages I'd once found funny or to detect hope in that final scene. The image of the sister on the train had taken on for me a dark prescience, because in the years since that evening in the cafeteria, I'd learned that Kafka, who died of tuberculosis in 1924, had had three sisters of his own, all murdered by the Nazis, two of them at Auschwitz.

Also, in my convalescence, I identified more closely with Gregor than I found comfortable. I suspected that my suffering, like Gregor's, might not be redemptive or even meaningful — a fate that doctors who become patients may dread especially. I sensed that even after I recovered I would be left marked — and I wasn't thinking only of the titanium rod holding my bones together or the long pink scar that bisected my inner forearm. I remembered the patients I'd known who'd insisted on keeping appointments with me to discuss symptoms that had resolved. I'd always found this puzzling; why would they bother to come to my office and pay for parking to tell me about symptoms they no longer had? I now knew why: they intuited that their illness had changed them in some way that needed to be witnessed and documented, even if the way it had changed them was simply that they now feared the illness would return. They had a story they needed to tell.

I, too, had a story, about my own metamorphosis. I suddenly felt old, vulnerable, out of the mainstream of life — not because of retirement, but because of my injury. And though I had a loving family and excellent medical care, I was unable to tell my story. Like Gregor, I found myself strangely muted. There is an essential loneliness to being ill or injured. As John Berger notes in his classic profile *A Fortunate Man: The Story of a Country Doctor* (another book our literature and medicine group discussed), what patients fear most is being "unique," rendered isolated by our suffering, unknowable and unrecognizable. My primary care doctor understood this fear. A few days after my surgery, she sent me a brief electronic message that was as therapeutic as any treatment I received. She wrote that she'd been wondering if I, a writer with an immobilized arm, was still able to write.

Doctors and nurses also are isolated, our stories suppressed by lack of time, concerns about patient confidentiality, and shame about how our deepest emotions may appear to our colleagues and to ourselves. There is an essential loneliness to being a clinician, too. I now think that reading *The Metamorphosis* with my group had felt less dark because we'd read it together.

Kafka wrote that "literature is the axe that breaks up the frozen sea within us." In medicine now there is much "frozen sea." The Covid-19 pandemic both revealed and exacerbated inequities in access to and delivery of health care, widespread clinician burnout, and

other systemic failures we often can barely contemplate, much less set right during our task-crammed days. And yet soon after my wrist surgery, I was back on Zoom with my literature and medicine group, and now, months later, we're meeting in person again over hospital cafeteria dinners, talking about books, sharing our own stories, feeling the waters warm.

Disclosure forms provided by the author are available at NEJM.org.

From Massachusetts General Hospital, Boston.

This article was published on August 5, 2023, at NEJM.org.

DOI: 10.1056/NEJMp2306003