Most of what is learned:

Thoughts on medicine's hidden curriculum

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ver the years, I have heard that a hidden curriculum underlies medical education. Two events that bookend a relatively long career in and around academic medicine have clarified my understanding of the term and its pervasive, irresistible, and often pernicious effects.

In 1972, while serving as a supervisor of medical residents in the medical school's outpatient clinic, a young woman (call her Lisa) came up to me and said she was a senior medical student taking a month-long elective course

in outpatient medicine. Dr. H., the clinic director to whom she normally reported, was unavailable, and she wondered if she could sign out a case to me. She described a man with esophageal reflux symptoms for which she proposed giving antacids. When I asked a few questions about the patient himself—who he was, what he did, where he lived and how—she was blank. We went to see the man, and, as always in my experience, the discussion with the patient had bearing on what we did and how. After some modifications, we agreed

on her basic proposals, and I signed off on the case.

The next week, Dr. H. was in the clinic, but Lisa sought me out to ask if she could present another case. This time she gave a deep and useful accounting of the personal and social variables that had been so conspicuously absent the week before. I suspected that Lisa had purposely wanted to show me that she could indeed construct a good and full medical history.

After we had talked to and taken care of the patient, I asked Lisa why she was spending an elective month in the medical outpatient clinic. "I wanted a last exposure to medicine because I begin a psychiatry residency in July."

I was amazed. "Psychiatry," I said, "Where you will spend your professional time dealing almost exclusively with the personal, social, and emotional aspects of patients' lives? How is it that you had collected none of that sort of information on the patient we saw last week?"

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45 years later

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Having been told that old-timers like me have no place commenting on contemporary medical education practice because we have no idea what life is like for teaching physicians today, I arranged to accompany one of our hospitalist attendings during his rounds on the teaching service. I was to watch but not talk, and I faithfully stuck to that. The

attending, Dr. R., and his senior resident visited all the patients on their service, ensuring that all procedural "i"s had been dotted and "t"s crossed. Then we came to the room of a 90-year-old man who had been found down at home, brought to the hospital, resuscitated with fluids, and was ready for discharge.

"He's quite deaf, and lives alone," Dr. R. said. "We think he should go to a skilled nursing facility."

In the room, Dr. R. sat at the patient's bed and told him (loudly) that he was ready for

discharge, but not strong enough to go home. "I've heard from the care coordinator that she has located a bed in a rehabilitation facility," said Dr. R.

"Just a moment, Sir!" said the elderly man. "Since I've been hospitalized here, I have looked at you as in charge of my care. Is that not correct?"

"Yes, indeed," said Dr. R.

"Then who is this care coordinator of whom you speak?"

Dr. R. mumbled a reasonable approximation of the truth, and we left the room. That's when I lapsed from my rules of engagement and asked, "That was the most astute perception and the most articulate, accurate vocabulary I have heard today. Who is this man, and how did he be-

come so erudite?"

The Pharos/Autumn 2019

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-Fred Haffertv1

Neither Dr. R nor his resident knew; we finished the rounds with me remaining silent.

The next day, I received an unsolicited E-mail from Dr. R. "I have tried to gather information about [the patient's] past, and he enjoys being evasive about it," he wrote. "Today, when I asked him, he spoke to me in Spanish, followed by French, Italian, and Latin. He told me if I could speak those languages, then I would know what he had done. I cannot, at least not well enough to follow his story. But fortunately (at least for my curiosity), an endocrinologist saw him in 2000, and took a detailed social history, which indicated that he was a French professor at [a nearby university] for 30 years, was educated at New York University, and also has a master's degree in divinity. He was a chess and checkers player, competing at the national level. Thought you might find that interesting; he is a delight to talk to even if (or because) he mostly just gives me a hard time. And he's leaving tomorrow for a skilled nursing facilitythough unfortunately not his first choice, as they didn't have any beds available."

Medicine's hidden curriculum

A tacit or "hidden" educational curriculum does powerfully shape what medical students and doctors learn and do. Fred Hafferty¹ said, "A great deal of what is taught—and most of what is learned—in medical school takes place not within formal course offerings, but within medicine's hidden curriculum." Can Hafferty be correct? That much of what is taught, and most of what is learned is communicated unconsciously? That neither teacher nor pupil know what is being transacted? Or rather, they do know, but do not know they know?

Michael Polanyi coined the term "tacit knowing" to describe his observation that we "know more than we can tell," giving as example the human ability to recognize friends in a crowd, to be correct in that recognition, but unable to say how we just knew who that was.

Collins³ developed Polanyi's theme, noting that the transmission of tacit knowledge (that which has not yet

been, or cannot ever be, made explicit) must "involve direct contact" of persons; that the "tacit is communicated by 'hanging around' with" someone who already knows tacitly; and that "in the workplace it is acquired by 'sitting by Nellie' or more organized apprenticeship."

In an ironic twist, Archibald Cochrane, godfather of the evidence-based medicine movement, which seeks to make explicit everything tacit in medicine, described his orientation to his first research job when he said, "Through everyday dialogue with colleagues, rather than any formal briefing, I soon learnt what was expected of me." ⁴

Cochrane's description encapsulates what Collins called the central core, the heart of collective tacit knowledge: the uniquely human "capacity to absorb social rules from the surrounding society."

Although I had long-ago heard about the hidden curriculum, the term always seemed somewhat arcane or vaguely sinister, as though something that could be explained was being obscured or withheld so as to not share with novices the knowledge available to those who pass the test of ordeal. The two anecdotes I have offered suggest to me now several different and possibly more valuable ways to look at the phenomenon:

collective tacit knowledge is so all-pervasive it supersedes any innate tendencies in another direction. Thus, Lisa was able to fully suppress her avowed (and ultimately realized) desire to specialize in psycho-social aspects of medical care. It was not that she quietly explored and secretly knew those—to her intrinsically attractive—aspects of caring, only choosing to keep silent about them in the public arena of the medical wards; she learned to not explore at all.

This should give pause to well-intentioned educators who want to inoculate beginning students with course work in medical humanities and holistic medicine, hoping to protect them from burnout and cynicism when they get to the medical wards. Unless that holistic vision is part of the culture's collective tacit knowledge, explicit teaching about it is doomed to fail.

The Pharos/Autumn 2019

Most of what I learned

- The hidden curriculum is as invisible to those who teach as to those who learn. No faculty member would ever admit teaching what Lisa learned. But learn it she did. When she said, "I thought on medicine you were supposed to <u>not</u> do that," she was foreshadowing what Hafferty said.
- 3. Not only students, but teachers, also, are shaped by collective tacit knowledge. Dr. R., considered one of the brightest, said he "liked" his patient without knowing why. A tiny prompt ignited an innate curiosity that revealed more about the breadth and depth of his patient than Dr. R. had imagined. But in homage to "time-pressure" or "clinical efficiency" or "we just don't do that here," he had been able to refrain from the sort of human connection that makes doctoring memorable and deeply satisfying.⁵
- 4. The hidden curriculum represents tacit rather than consciously suppressed knowledge. It is, therefore, likely to be impervious to inquiry by survey or questionnaire; to be revealed through its outcome and to be visible in anecdote and circumstance. It is also more likely to be detected by outsiders—ethnographers or sociologists like Hafferty—than by curriculum creators.
- 5. Most of what humans know probably reflects tacit, not explicit knowledge. For instance, my fingers know the keys of the keyboard on which I type, but I cannot draw a picture of the keyboard. If we decide that we don't like what our students learn (or fail to learn), we had better look at the prevailing culture, not at the explicit curriculum. Culture is the font from which collective tacit knowledge springs, and explicit teaching rarely corrects it.

The only antidote for malign tacit learning is to change the school of thought in which we fishes swim.

References

- 1. Hafferty FW. Beyond curriculum reform: Confronting medicine's hidden curriculum. Acad Med. 1998; 73(4): 403-7.
- 2. Polanyi M. The Tacit Dimension. London: Routledge and Kegan Paul, Ltd. 1966.
- 3. Collins H. Tacit and Explicit Knowledge. London: University of Chicago Press. 2010.
- 4. Cochrane AL. One Man's Medicine: An Autobiography of Professor Archie Cochrane. Cardiff: (Wales) Cardiff University. 2009.
- 5. Liebowitz J. A year at the bedside with Osler. JAMA Intern Med. 2017; 177(7): 911–2.

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John Lipscomb (A Ω A, University of Kentucky College of Medicine, 1987) passed away May 2, 2019.

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Frederick C. Newt (A Ω A, West Virginia University School of Medicine, 1967) passed away July 4, 2019.

Gerald Weissman (A Ω A, New York University School of Medicine, 1965, Alumnus) passed away July 10, 2019.

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H. Oldham (A Ω A, Baylor College of Medicine, 1960) passed away July 29, 2019.

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Paul Edwards (A Ω A, Keck School of Medicine of the University of Southern California, 1954) passed away September 17, 2019.

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