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## DOCTORS Doctors Getting 'Pimped' By Dhruv Khullar, M.D. May 26, 2016 6:28 am

"Name the five brachial plexus roots," a senior doctor commanded.

I'd spent hours memorizing the anatomy of the arm and shoulder that week. But now — in front of a small audience of patients, nurses and medical students — I squeaked out just four.

"What trunks do they give rise to?" he continued.

Oh boy. It wasn't going to stop. Whatever the nerves' configuration was, currently their main function was helping me knead my sweaty palms together. Mercifully, he shifted to another student to solicit what divisions the trunks split into.

My teacher was "pimping," a core aspect of teaching on the hospital floors. The term, said to be derived from the German coinage *pumpfrage*, for "pump question," refers to asking students a rapid series of questions, from thought-provoking and relevant to esoteric and unanswerable. It continues until teachers run out of questions, or doctors in training run out of answers. I'll let you guess which usually comes first.

As a medical student, I was a frequent pimping recipient. Now, as a second-year resident, someone who both supervises and is still supervised, my relationship with it is more complicated: I find myself both dispensing and dodging questions. (When I do "pimp" others, I try to be gentle.)

Pimping has spawned many creative defense mechanisms, ranging from avoiding eye contact to pretending to choke. Some students use the "politician's approach": answer the question you want, not the one you're asked. My favorite strategy is the "muffin technique," whereby you hold a muffin close to your mouth so the questioner thinks you're about to take a bite. If you're pimped anyway, then, obviously, pretend to choke.

But medical training's emphasis on demonstrating how many facts we know — typically in front of colleagues, nurses, patients and families — is problematic. It encourages us to learn to show, not grow — to project confidence, and dismiss uncertainty.

In her research on educational development, the psychologist Carol Dweck outlines two models for intellectual growth. Students who view intelligence as a fixed entity want to prove themselves and avoid looking unintelligent. Because they see intelligence as a stable trait, they avoid difficult tasks and treat failure as a threat. By contrast, students with a growth mind-set view intelligence as malleable. They're more concerned with process than outcome and treat failure as an opportunity. Importantly, these mind-sets are not immutable. Educators can substantially influence the approach students adopt.

Consider the following example. Let's say I leave medical school and begin my residency thinking: *I'm slightly weaker in rheumatology than other specialties*. I can't remember which antibodies predict which disease. On rounds, I don't speak up or ask clarifying questions. When accepting new patients into my clinic, I shy away from those with diseases like rheumatoid arthritis and lupus. At the end of training, I think: *I'm just not that good at rheumatology*.

Consider an alternative scenario. I'm subpar at inserting central lines threading a catheter into a large neck vein. On my first few attempts, I fail. My supervisor takes over and easily passes the catheter. But I don't fear looking incompetent or accept my lack of skill as an innate deficiency. I study anatomy. I watch videos. I ask supervisors to page me before placing lines. When E.R. doctors ask if they should place one before transferring a patient, I say I'll do it. At the end of training, colleagues ask for *my* help inserting difficult central lines.

The most important medical learning comes not from memorization and recitation, but by thrusting yourself into situations just beyond your comfort zone. This controlled stretching makes us better, but is anathema in a performance mindset. Trainees in a growth mind-set, however, gravitate toward — not away from — challenging clinical experiences.

Research suggests senior physicians' teaching styles influence whether trainees embrace growth or performance mind-sets. Residents with supportive supervisors are more likely to seek and incorporate feedback. And our training environment affects how we practice throughout our careers.

Our approach to medical knowledge and learning has important consequences for the education of new doctors — and profound implications for patient care. We wear factual knowledge as a badge of honor. We disguise and avoid uncertainty. But if we can't embrace uncertainty with our peers, can we do so with our patients?

Being unsure about a patient's diagnosis or how a disease might progress is inherently uncomfortable for doctors. Studies find that patients are less satisfied when physicians communicate uncertainty, but also that how doctors communicate uncertainty matters, and that in general we're not very good at it.

But uncertainty remains an integral part of medicine. Even the most rigorous trials rarely answer the questions most important to doctors and patients: how to weigh risks and benefits; how a patient will respond to treatment; how long he or she has to live.

Research on communicating uncertainty is **fledgling**, but it does suggest that, at the very least, we need to recognize it exists, clarify its sources, and acknowledge its challenges for patients and families. Research also suggests that younger physicians are **less comfortable** disclosing uncertainty to patients, but that our attitudes **can** evolve over time.

We're educated in a model that demands certitude, confidence and rightness. But we work in a profession imbued with uncertainty. Ultimately, training doctors to grow — instead of show — may lead to more curious physicians, and more honest patient interactions.

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