Written by Allan Besselink Wednesday, 31 August 2022 21:06



At some point in time, it is highly likely that you, or someone close to you, will have reason to enter the health care system. The individual will then depend upon the diagnostic prowess and clinical reasoning of one or more health care providers. There was a time when you could place your faith in the system to serve you well. My recent experiences, however, would challenge that deeply-held assertion. It is as though the critical thinking of many a clinician has disappeared in the Bermuda Triangle of health care.

The goal of any clinician is to understand the behavior of the patient's problem, whatever that problem may be. However, my experiences as a patient, along with those of my parents and friends, remind me that the health care system, as a whole, isn't always aligned with the principles of scientific evidence, critical thinking, clinical reasoning, and true patient-centered care. Health care has become the Bermuda Triangle, a place in which things often disappear or go wrong.

I never cease to be amazed, or should I say mortified, by how many clinicians - be they physicians, physiotherapists, chiropractors, you name it - utilize poor critical thinking skills in their feeble attempts at assessment and diagnosis. Patients and clinicians alike should consider the following:

The Patient Has The Evidence. As Sunderland once noted, "the patient has one witness, and the clinician has none." If you listen to the patient, they will tell you what is wrong - both literally and figuratively. All of the diagnostic answers are contained within that very person sitting right there in front of you. It's your task to sort out how the pieces fit given the context, and it's tough to do if you're listening for 20 seconds before interjecting and moving on.

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Hypothesis Testing. Collect some relevant data based on concordant signs and symptoms. Establish baselines via some means of testing, be that functional, symptomatic, or mechanical. Formulate a working hypothesis, and set out to prove the hypothesis wrong; attempting to prove it right only produces confirmation bias. A simple process, indeed. However, tests are far too often chosen based on some rudimentary level of pattern recognition which is made more difficult if you don't actually listen to the patient or you're too busy abiding by your confirmation bias.

Change. Health care involves problems of a dynamic nature - because life on planet earth isn't static. Any diagnostic assessment, be it imaging or lab work, postural examination or special test, is just a snapshot of the body at that moment in time. Change over time is critical to evaluating the DYNAMIC nature of the problem. What is the point of testing if you aren't going to assess change over time? Integrate this data to either disprove the original hypothesis, adapt one's thinking, or formulate new hypotheses. Lather. Rinse. Repeat.

Mechanisms. The understanding of change and the dynamic nature of a problem then give us the ability to understand the mechanisms that are underlying the presenting problem. When signs and symptoms and changes in function don't match the protocol or pattern, then what? The parts obviously fit because the patient is right there in front of you. It's your thinking and understanding of the mechanisms that don't fit. Have the humility and insight to change it to align with what the patient tells you and how it correlates with the data you've collected over time.

Arbitrariness. Throwing ideas at a wall and hoping that they stick is not health care - it's chance. Diagnosis is not chance. Health care should not be either. The danger of arbitrariness is that it fosters the development of hypothetical (and oftentimes highly detailed) rationale deemed necessary to explain the patient's problem. While this may provide a label to a problem over the short term, it also promotes building further lousy critical thinking on a foundation made of quicksand. Again, hypothesis testing is integral to the prevention of arbitrary assessments and interventions.

Time Alone Isn't Treatment. Time itself is not an assessment or intervention of choice. If you do nothing, absolutely nothing, or what essentially equates to nothing, then you shouldn't expect much to change. You've not provided a stimulus to elicit a response; when you see no change, you shouldn't be surprised. Remember that as the song says, "if you choose not to decide, you still have made a choice." While time is a necessity in the process of change, clinicians far too often use the "maybe it just needs more time" as a scapegoat. Understand expectations based on the timeline of physiology.

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If there is a message for patients, it is always to challenge the critical thinking of the clinician. Expect them to not only explain it without becoming defensive but also to have their explanations be consistent with both your narrative and current science. Patients appreciate it when someone is direct and forthright. Even if it is not a clear direction, it is at least a direction founded in data and science and not the persistence of care based on the cult of personality, pseudoscience, or financial gain.

If there is a message for clinicians, it is simple: we must do better for ourselves and our patients. Stop learning about "stuff." Learn the principles of logic and reasoning and the scientific method and apply them rigorously to each and every patient. In the end, we must advocate for patients: by calling to attention that which is unreasonable, by guiding patients in what reasonable expectations are and aren't, and to align our best efforts with sound critical thinking.

The Bermuda Triangle of health care will become a better and safer place for all of us if we do.

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