

The Testing Frenzy

According to conventional communication theory, the results yielded by any given laboratory test constitutes the message. This traditional view, however, received a contravening jolt when communicologist Marshall McLuhan advanced this adage: THE MEDIUM IS THE MESSAGE. He suggested that what came across to audiences on the television screen was not the message. The "real" message was the existence of the phenomenon called television, not the programming it generated. This analogous revelation can be applied to laboratory testing. To repeat: the fact that various tests exist is the "real" message, not the results they emit.

The testing frenzy by which present day physicians are possessed is characterized by a chain reaction of one test forcing the use of another and another ... until patients are either injured in some way, have their hospitalization extended unnaturally and unnecessarily, or have their bills run up enormously. We appear to be living in an age where clinical judgment, without objective corroborating data, simply does not constitute the persuasive kind of proof it did in the past.

Laboratory tests are used to confirm or deny a diagnosis, determine whether an insurance company will honor or reject a claim, or shift the balance of evidence in a malpractice case. Although the credibility of an expert witness in court still carries weight, orthodox laboratory test findings continue to be treated as persuasive forms of proof by jurists.

The number of tests performed on patients has risen over the past two decades at the rate of 10 to 15 percent -- perhaps more. This is especially true in teaching hospitals. In the professional mind, regardless of the circumstance, doctors run a greater risk for not ordering a particular test, rather than ordering several unnecessary tests.

Tests have become a substitute for sound clinical judgment. Spinal listings derived from palpation that are not supported by x-rays are regarded as being diagnostically inconclusive. With the advent of CT scans, EMGs, and MRIs, even routine office x-rays appear to have lost some of their diagnostic reliability. More than ever before, doctors have been turning away from their five senses, their common sense and, instead, begun to huddle around technology and rote. The "need to know" has given way to the "ability to know."

Further complicating matters is the fact that physicians often do not know the range of normal readings and how laboratories arrive at these alleged norms for each test. Paradoxically, there is no internationally, or even nationally agreed-upon "norm." Independent laboratories and hospitals, on occasion, will have their own set of numbers for what they consider normal. Evidence of the implicit variability that occasionally attends laboratory norms is that some people are perfectly healthy even though they do not fall between the gunsights of a given rigid and predetermined "normal range." Numbers that fall only a slight fraction outside of the normal range may doom a perfectly healthy individual to unneeded therapeutic procedures.

Richard K. Riegelman, MD, of George Washington University Medical Center states, "Ideally, the physician should know which reference population was used to define the range of normal for a test." Riegelman also states, "In interpreting test results, doctors need to remember, but frequently forget, (or never learned) the following: (1) outside normal limits does not equal disease, (2) within

normal limits does not equal disease free, (3) changes within normal limits may be pathological, and (4) within normal limits does not equal desirable. The range of test values reflect the test values of a reference population believed to be free of disease at the time the test was done. These values may be higher than desirable and may indicate an increased tendency of members of the reference population toward development of disease in the future. For instance, the weight and cholesterol levels of Americans are often said to be, on the average, higher than desirable and contribute to the development of heart disease. Failure to recognize the distinction between within normal limits and desirable ... may have therapeutic as well as diagnostic implications."

Aside from the information disseminated by independent laboratories, many doctors have set up their in-office laboratories. This practice has been made increasingly more attractive since the advent of newer, more compact, computerized technology. Studies have shown, however, that these home-grown labs are notoriously poor at what they do. It has been found that in-office labs perform less accurate work, use fewer safeguards to minimize erroneous results, and employ fewer personnel with training in clinical laboratory procedures than do licensed clinical facilities. This may be due to the fact that the thousands of in-office labs are exempt from a broad spectrum of mandatory federal, and sometimes state, regulations that govern licensed clinical labs and establish standards for quality control.

Any form of diagnostic test involves interpersonal communication between the patient, doctor, and laboratory personnel. Any one or a combination of these parties can be taken to be responsible for a breakdown in communication. Ordinarily, based upon an examination, the doctor will order one or more tests. If not performed in-office, the patient is sent to an independent laboratory. There, a technician administers the test and it is interpreted by an MD in attendance. A written report is then sent to the treating doctor who, in turn, explains its meaning to the patient. Regardless of how innocuous the report, how it is explained to the patient could make a tremendous difference. Some doctors are, by nature, alarmists; others are more considerate and understanding of the patient's feelings.

Everyone reading this column grew up taking various tests. Recall how important an individual's I.Q. used to be. Throughout school life, tests were used to measure a student's worth. Practically everything involved some kind of test; e.g., sports, driver's license, college entrance exams, job promotions, organizational membership, -- the list is endless. Conditioned to being tested in this manner, it is only natural that when people become ill, they accept more tests as a matter of course. Unfortunately, these very test results have taken on far more credibility than they rightfully deserve.

No matter what kind of tests they are, they feed our desire to know, our desire to trust the competency of the tests, our willingness to believe their results. Patients have been known to prefer an MRI disclosing a herniated disc, rather than not knowing what is wrong with them. But worse than that, tests results can cause pain or send a patient down the wrong therapeutic path. An example is the case of a healthy sixty-one year-old male who underwent a routine physical examination. Test results were all negative except for a slightly elevated serum phosphatase. When the physician was asked its significance, the patient was told, "It could mean prostatic carcinoma." However, the physician indicated that he would have the test re-run. Two weeks later, the test came back negative. For the two week interim, the patient was convinced that death was around the corner; he went through an emotional hell -- all because the test result was perceived as an expression of certainty.

To illustrate the folly of imputing absolute certainty to lab test results, here is a favorite study Robert Mendelson, MD, relates in *The Negligent Doctor*, by C. Kramer. It involved a situation in which 197 out of 200 patients were cured of their abnormalities simply by repeating their lab tests.

Tests, in and of themselves, do not give definite yes or no answers. They only serve as guideposts and should not overshadow other aspects of sound clinical judgment. A dedicated doctor who is experienced at examining patients, asks relevant questions and listens well, can often uncover disease more accurately than any test that is performed.

The objective of this article is not to totally discredit testing, but rather create a more appropriate therapeutic perspective. Laboratory tests, like words, are communicative tools which facilitate the dissemination of information. Notwithstanding McLuhan's contention that the test is the message, not the meaning it transmits, the effect upon a patient should assume center stage and receive priority status.

A patient's file filled with data, by itself, is meaningless. A correlation must be made between the patient's thoughts and feelings, the doctor's view of the matter, and whatever information can be gleaned from medical and chiropractic literature. Any one of these components, in isolation, will lead to false conclusions.

Laboratory tests are not the ultimate arbiter when it comes to healing. The ability of a chiropractic physician to communicate with a patient is no less important than the printouts of diagnostic technology. Regrettably, we are caught in a Catch-22 situation. If we under-test, we are faulted by insurance companies and become more vulnerable in malpractice proceedings; if we over-test, we compromise our chiropractic oath pledging not to exploit our patients. In both instances, the alternatives cancel each other out, i.e., we are damned if we do and damned if we don't.

It is imperative that the reader not mistake my meaning. I do not mean to imply that laboratory testing lacks value. A certain amount of discrete testing is essential to responsible health care. It is the imbalance that I implore. Doctors have become intimidated by financial and judicial constraints imposed upon them by a bureaucratically dominated system.

As we enter the 21st century, it is highly unlikely that testing in health care will lessen; if anything, it will probably increase. In all probability, testing will be enhanced by more sophisticated automation. I envision something like this. A patient in pain dials an 800 number. An automated recording instructs the patient to press (1) and describe the symptoms; press (2) for a diagnosis; and press (3) for treatment options. While this may be an oversimplification, it certainly captures the spirit of Star Trek. Testing, if carried to an extreme, will most certainly replace tomorrow's doctors with microchips instead of flesh and bones. I have absolutely no idea how to thwart this seemingly inescapable outcome. Do you?

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