

My First Half-Century in the Iron Game

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In quite a few of my previous chapters in this series I have made a number of very disparaging comments about the scientific and medical communities, have tried to clearly point out the fact that the scientists, in general, are not what they would have us believe that they are; that scientists, like other people, are just that, people, and that they have all of the same problems and shortcomings that the rest of us share. In fact, far from being the solution to our problems, scientists are much more likely to be the source of our problems.

As somebody once said . . . “Who watches the watchers?” In effect: is it safe to let the police investigate themselves? Is it wise to let congress stand as the only judges of their actions? Personally, I think not.

Yet, in the scientific community, that is exactly the type of system that we are supposed to accept without question. Scientific truth and integrity are supposedly assured by the so-called Peer-review System of scientific publications. Which simply means that nothing is published in a scientific journal until it has been approved by other scientists working in the same field, so-called “peers,” people who are supposed to be recognized experts in that branch of science.

So, in practice, when an article is submitted to a journal for publication, the editor of the journal removes any mention of the author’s name or affiliation and then sends the already-censored article to some unknown expert for evaluation; then, having devoted an average of less than two hours to reviewing the article, the supposed expert then either accepts it for publication or rejects it, and his decision is final. If such articles were reviewed and evaluated by God, then this system might make sense, but given the fact that the actual reviewers are not God it merely produces nonsense.

As it happens, my voice on this subject has not been a cry in the wilderness with nobody there to hear it; in fact, there has been quite a lot of objection from other sources, not the least of which has come from the editors of JAMA, The Journal of the American Medical Association, which journal is one of the oldest and most respected of the current peer-reviewed journals. Some of which comments I will quote in the next few paragraphs: statements that were lifted directly from the pages of JAMA in one of two issues of that journal that have been devoted to the subject of problems with the peer-review system.

JAMA, March 9, 1990-Vol 263, No. 10 . . . “CONCLUSIONS: I cannot put my conclusions too strongly. To further the cause of improving patient care, it is the duty of editors to encourage innovations as well as to ensure quality control. This requires a conscious effort of will to look askance at hypercritical reviews of innovative articles. It also requires an awareness that even some of the most distinguished of scientists may display sophisticated behavior that can only be described as pathological. Editors must be conscious that, despite public protestations to the contrary, many scientist-reviewers are against innovation unless it is *their* innovation. Innovation from others may be a threat because it diminishes the importance of the scientist’s own work.

So what is an editor to do when it does appear that an article may possibly be highly innovative? First, think a lot harder than usual about to whom the article should be sent for review. The idea that all scientists are peers simply will not do. Second, try to ensure that the reviewer is of the highest possible quality in terms of either the absence of vested interest or, equally valid, the open recognition that such an interest is present. Third, find a reviewer with generosity of spirit who will not recommend rejection because of those faults that can be found in any article but that do not challenge the fundamentals of what is being said. Fourth, never forget the possibility that even the most eminent or urbane of reviewers may occasionally be corrupt or malign or that lesser folk may be acting under duress. Fifth, be an editor, read the article carefully, and make an informed judgment on the basis both of what it says and of what the reviewers say. And finally, remember that while an editor has a duty both to ensure quality and to encourage innovation, both of these things are means not ends.

The true aim of peer review in biomedical science must be to improve the quality of patient care.”

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In another section of the same issue of JAMA, they had a great deal to say about the so-called “readability” of scientific articles; which, they said, was generally very bad, so bad that it was usually all but impossible for any reader to even understand just what the authors were trying to say.

In another chapter in the same issue of JAMA, they mentioned the fact that the system intended to deal with fraud and outright lies in scientific articles was very poor; that even after an article had been exposed as outright fraud it still continued to be quoted and generally believed; that no real effort was ever made in the direction of bringing the fraud to the attention of the scientific community in general.

A prime example of that last point is demonstrated by just what happened, or failed to happen, when the infamous article by Tom Pipes and Jack Wilmore about the supposed superiority of isokinetics was exposed as an outright fraud, the article supposedly being a report of the results of a research project that in fact was never performed. One author of that article, Jack Wilmore, suddenly remembered, after the fraud was eventually exposed, that he was out of the state at the time and thus had no real knowledge about the study. Sure. But if so, then why was he listed as one of the authors?

Conducting meaningful research in the field of exercise physiology is a long, slow, expensive and very difficult undertaking: you must have a large group of willing, cooperative subjects who will carefully follow instructions, must pay careful attention to the one-on-one supervision of literally hundreds, or thousands, of exercise sessions, must have meaningful and accurate tools that are capable of providing specific and accurate tests of the results. And then, of course, you must be observant enough to see just what results are actually produced, and honest enough to report those results, regardless of what they may be.

More than ninety-nine percent (99%) of all of the thousands of supposedly scientific research projects conducted in this field have been worse than worthless, worse because they were not only meaningless but were misleading; which should not be a surprising result given the fact that until rather recently none of these researchers had any tools that were capable of producing meaningful test results. And just how can you evaluate the results if you cannot measure them? You can't; or could not, at least, until after MedX medical testing machines were introduced in 1986. But even then hundreds of researchers continued to use tools of no slightest value, and then reported results that are somewhere between stupidity and outright fraud.

The very fact that hundreds of such articles are still being printed every year in supposedly scientific, peer-reviewed journals should tell you all that you need to know about the actual value of such journals. If not, then you are just as stupid as the authors of such articles.

Perhaps the most important bit of advice that I can offer you is to point out the fact that you should be very cautious about just whom you go to for advice.