

Editorial

Cheating on research data — Is it really worth it?

Yet again fraud in science rears its ugly head—this time it is a medical researcher who falsified data in a large study of the surgical treatment options in treating breast cancer.

Regrettably, falsification of research data is more of a problem than most people will admit. The recent disclosures in North America concerning a Montreal cancer surgeon who falsified data in a large study of breast cancer, supported by the National Cancer Institute, sent shock waves through the medical community. Additionally, and not surprisingly, the reaction of the women who had relied on this falsified study data in making perhaps the most important decision of their lives—whether to have a radical mastectomy or a “lumpectomy” in an attempt to rid themselves of breast cancer—was one of deep anger, disappointment, and loss of confidence in health care research.

From the results of the investigation into the fraud, it appears as if Dr Roger Poisson fabricated test results in order that unqualified women would qualify for the study. Poisson deviated wildly from an important study design criterion—that the cancer should have been detected within 28 days of enrollment in the study. Poisson claims he ignored this scientifically stipulated restriction to allow more women to have the opportunity for state-of-the-art treatment in the study. It seems incredible that a man with such an unsophisticated view of the scientific method could have become a principal investigator on a major study of such an important disease.

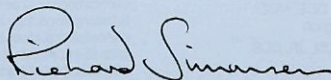
Perhaps even more worrisome is the fact that it took over 2 years, and an inquisitive newspaper reporter, to make public the fact that data in the study had been falsified. This cover-up of evidence that scientific fraud had taken place meant that hundreds, perhaps thousands, of women relied on falsified data for health care decisions. Blame for this inexcusable delay lies squarely with the National Cancer Institute.

Data falsification is not confined to our medical colleagues. Even though dishonesty in medical studies is liable to have more serious, life-or-death consequences than falsification of data in a dental study, we must be just as vigilant about information on which we base treatment choices for our patients.

It is hard to get some colleagues to accept that we have crooks in our midst — yet some people, for whatever motive, will falsify data. From my earliest days in dentistry to the present, I have seen fraud with my own eyes. As a neophyte researcher right out of graduate school, I watched in amazement as a respected researcher and scientist boldly faked the photographic “documentation” of some allegedly old (and yellowed) radiographs. The study hypothesis was that radiographs turn yellow with age. He said he “knew” the answer so he proved it by photographing the same radiograph through different strengths of yellow filters! More recently, an “eminent researcher” at a major university in the United States was unable to produce the sections of monkey teeth upon which he had written a “final” report on an important histologic study. He had the numbers, but not the teeth from which the numbers were allegedly tallied. What he did have was a series of excuses for being unable to produce the data. Unfortunately for the researcher, he did not expect that the excuses would be checked — none survived scrutiny.

It is bitterly disappointing to have colleagues show so little respect for the scientific method, for the profession, for the trust that the world outside the profession has bestowed upon us as members of a health care profession, and, ultimately, for their own self worth. Those committing scientific fraud may well justify their actions in their own minds — the real tragedy is that treatment decisions for unsuspecting patients will be made by unsuspecting colleagues based on fraudulent data. Inappropriate or even dangerous treatment may result and better treatment options may be neglected. The patient may, in serious cases, be irreversibly harmed, to the point of diminished quality of life.

Is it really worth it?



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