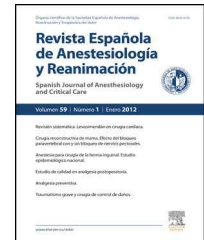


# Revista Española de Anestesiología y Reanimación

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## EDITORIAL

### Fraud in Anesthesia – An Editor's Perspective



### Fraude en Anestesia: perspectiva del Director de una revista científica

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I was delighted when Dr. Errando, Editor-in-Chief, invited me to prepare an editorial on the occasion of the 60th anniversary of the *Revista Española de Anestesiología y Reanimación* in advancing the practice of medicine. The topic he suggested, «Fraud in Anesthesia» surprised me at first, but it is certainly timely. We have seen major public disclosures over the past decade, progressing from several fraudulent papers in the case of Reuben to dozens in the case of Boldt to hundreds in the case of Fuji. According to an opinion piece in *Nature*, the number of fraudulent papers published by Fuji set a world record and, according to the commentator, reflected the ability of anesthesiologists to do clinical research alone, without teams or colleagues keeping an eye on them. In my opinion this comment says as much about the lack of understanding of the commentator as it does about anesthesiologists. But there is no doubt that these famous cases have altered peer review and publication, with Editors using ever more sophisticated methods to detect fraud. These cases have also cast a shadow of suspicion which pervades the entire review process.

Rather than describe types of fraud and how journals attempt to uncover them, I will restrict my comments to three consequences of scientific fraud. First, in addition to destroying the careers of the perpetrators, fraud affects all those who worked with the perpetrator. In some cases of multi-center studies, entire teams of investigators are tainted by the stigma of fraud despite having done nothing wrong. They performed the study properly at their site, reviewed the final data (unbeknownst that data from

another center were fabricated) and published the article in good faith. In other cases students or junior faculty was duped by their mentor and some of their hard-earned work poisoned by addition of fabricated data and retracted papers by the mentor. Much has been written recently about the dearth of clinician investigators in the specialty, and we cannot afford this collateral damage from fraudulent investigators to cause well-trained and potentially productive investigators to leave research entirely.

A second consequence of scientific fraud is its effect on clinical practice. The three high profile cases of fraud in the specialty over the past decade mentioned above generated, to a large extent, support for the use of new anti-inflammatory drugs for postoperative analgesia, new colloids for volume expansion intraoperatively and in the critical care unit, and new anti-emetic drugs for postoperative nausea and vomiting. Practitioners who incorporated the results and recommendations from this fraudulent research may have exposed their patients to unnecessary harm, since in many cases adverse events were reported to be lower than observed in non-fraudulent studies of these same new treatments. In addition, these new compounds were often much more expensive than existing ones, resulting in more costs to provide health care at a time when budgets are tight.

But these consequences of scientific fraud pale in comparison to the damage they do to the profession in particular and to society in general. Why should a busy practitioner attempt to stay current in new treatments if he/she believes academicians are simply making up data for their own advancement? What do peer review journals have to offer in this day of open access publishing if the articles

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they refine and publish cannot be trusted? And, as scientific illiteracy and disdain for science continue to advance in modern society, why should the public bother to try to understand science if its results are fabricated to advance a career or a point of view?

People make unethical choices and it should come as no surprise that, just as there are unethical politicians and lawyers, so are there unethical physicians and scientists. In each case the harm from the unethical behavior extends far beyond the individual. Fraud in anesthesia research can destroy promising careers of developing

investigators, can increase patient harm and health care cost, and can undermine the basis of medical practice and our role as science ambassadors to the public at large. Each of us, from Editor to colleague, from peer review to private practitioner, should acknowledge fraud, but at the same time try to prevent its consequences. I for one am proud of the scientific advances anesthesiology has made to the family of medicine, including those published in the *Revista Española de Anestesiología y Reanimación*, and look forward to even better years to come. Congratulations on 60 years of wonderful service and to many more!