

## BOOK REVIEW

**John Abramson, MD, *Overdo\$ed America***, New York, NY: HarperCollins, 2004.  
xvii + 332 pp ISBN 0-06-056852-6

The subtitle: “How the Pharmaceutical Companies Distort Medical Knowledge, Mislead Doctors, and Compromise Your Health” tells what 2/3 of this book is about. Much more of the range of the dismal effects of unbridled capitalism on medical treatment in the USA is covered by this Harvard-educated family doctor who has returned to Harvard to teach primary care. A quote from pp258-259 will illustrate:

“Government needs to be re-empowered, and a good place to start might be public hearings that investigate the the commercial distortion of our medical knowledge. The first ‘case’ might be an investigation of the process by which Celebrex and Vioxx, two drugs of very limited clinical value, ...[which became] blockbusters in the United States [sales over \$1 billion per year] but not in the rest of the world (nearly 80% of all sales occurred in the United States). Such hearings could publicly review the unprocessed data from from the manufacturers’ own studies that have been submitted to the FDA; expose the discrepancies between these data and the articles that reported the ‘scientific evidence’ about the two drugs, published in our two most respected medical journals; inform the public about the financial ties between each of the four authors of the clinical practice guidelines issued by the American College of Rheumatology in 2000, which recommended the use of these drugs, and at least one of the manufacturers of Celebrex and Vioxx; show that in 2001 (when these drugs were being established as the standard of care) they were the two most heavily advertised to the public and two of the most heavily marketed to doctors; show how drug company—funded continuing education has persuaded doctors to prescribe these drugs; show how the FDA has known this whole story since February 2001 and, despite issuing Warning Letters to the manufacturers of both Celebrex and Vioxx about false and misleading marketing, has not effectively corrected doctors’ and the public’s erroneous beliefs about the true clinical value of these drugs; and, finally, show how all these tactics were masterfully orchestrated to produce \$5.3 billion of COX-2 inhibitor sales in the United States in 2003.”

As you can see, the problems posed by the excesses of Big Pharma are staggering.

Here are some specific means Dr. Abramson wrote about by which medical knowledge is distorted:

- A clinical trial result can be published in a peer-reviewed journal where the results are not statistically significant, yet claimed to be highly positive.

- Relative risk reduction (RRR) is used to magnify results when the absolute risk reduction is small. If a drug, test, or device cuts the subjects with the medical condition from 2 in a million to 1 in a million, the  $RRR = 50\%$ . But in such a case, why bother?
- Many clinical trials study mostly or entirely men, but the results are applied to women as well.
- Subjects in clinical trials may be 40-60 years old to start, but the results are then applied to those 70-90 years old and children.
- Key findings often are not in the abstracts of the articles reporting on clinical trials.
- Review papers are often written by drug industry experts to praise certain drugs.
- Clinical trials are stopped when the data become bad for the drug, not when the original trial duration planned has been reached.
- Trials that do not favor the drug are not published or reported to the FDA.
- Advertisements for drugs ignore FDA warnings on over-promotion.
- Common conditions are elevated to pathological states to sell drugs.
- Surrogate endpoints (bone density, blood pressure, cholesterol) are substituted for clinically certain endpoints (death, cancer, heart problems, ability to walk).
- Internet sites claiming to be patient focus groups are sponsored by drug companies.
- Continuing Medical Education seminars are produced by drug, test and device makers to sell their products, not to educate.
- Physicians are wined and dined to favor certain corporate goals.
- Physicians' prescribing habits can be purchased from pharmacies to see whether the MDs have responded to sales pressures.
- The FDA and the NIH are influenced by industry by implanted employees and consulting agreements.
- Congress is lobbied by the biggest force of any industry to pass favorable legislation.
- Rare comparison tests between drugs use non-equivalent doses to favor the sponsor of the trial.

- Ghostwriters are hired to draft papers for medical journals that will most favor the drug, device, or test.
- Physicians' offices are routinely invaded by "detail women" bearing biased literature, gifts, and food.
- Treatment guidelines are promulgated by mostly industry lackeys, and made to seem as though the federal government has backed the guidelines.
- The direct-to-consumer ads on TV destroy the doctor-patient relationship.

In addition to the stated goal of this book, Dr. Anderson also addresses medical school snobbery. An example is that general internal medicine is too low in the pecking order compared with neurosurgery, for example. He deplores the excesses of expensive treatment vs. the lower cost of prevention; the Medicare Prescription Drug Improvement and Modernization Act of 2003 as a give-away to the drug companies; the failure of the FDA to use the power it has against Big Pharma. He is aware that most major advances in treatment are developed in government or academic laboratories, not by Big Pharma.

He was aware of the lack of evidence for the 2001 cholesterol level guidelines, the financial conflicts of those who wrote them, and the teeny benefits for statin drugs in most people who take them as the almost inevitable result of the guidelines. Too bad that Uffe Ravnskov, MD, PhD, possibly the most accomplished and published cholesterol skeptic worldwide, and the website he founded, [www.THINCS.org](http://www.THINCS.org), were not mentioned or referenced.

He did not emphasize that a number of common tests, other than angiography and for C-Reactive Protein level, that are of little or no value (Welch, 2004). He notes physicians' ever-present fear of malpractice suits as one of the goads to too much testing.

Dr. Anderson makes the very positive suggestion that evaluation of medical science evidence and promulgation of treatment guidelines be given to the Institute of Medicine of the National academy of Sciences, and that the experts to be on the panels of the IOM be insulated from Big Pharma (p250). A second suggestion is that all clinical trials be pre-registered with the intended protocol given, so that results of trials are harder to hide.

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Well, no one is perfect, and there were some serious errors, the most so being on diet. The low-fat, low saturated fat and cholesterol, high complex-carbohydrate (whole grains even) diet dogma appeared — unscathed by tons of evidence against it. Since so many ailments start with obesity, syndrome X, and type-2 diabetes, the main cause beyond genetic predisposition is excessive carbohydrate consumption (Mozaffarian et al., 2004; Ottoboni et al., 2002; Ravnskov, 2000). The American Heart Association was presented as a useful source of diet advice despite evidence that it is not (Kauffman, 2004). Type-2 diabetes was described as a condition when too little insulin is produced by the body; this is correct only in the late stages. Surprisingly prevalent grain allergies were not addressed at all.

A great section on the myths of osteoporosis was dimmed a bit by failure to recommend

magnesium and trace elements, such as boron and manganese, in addition to the usual calcium and vitamin D supplements (Atkins, 1998).

Multiple recommendations for exercise do not make enough distinction between moderate and extreme exercise. Dr. Abramson gives no warning that the latter causes cardiovascular disease and arrhythmias that lead to sudden cardiac death. There is no placebo for exercise. People who are healthy do more of it. Those who are unwell do less of it, and they are often instinctively correct (Solomon, 1984). When accurate reporting of the effects of even voluntary exercise on heart patients is examined, the benefits are minimal (Hambrecht et al., 1993).

Dr. Anderson was frank about the side-effects of many classes of drugs, but did not dwell on the fact that 3/4 of people taking statins and blood pressure drugs stop within 2 years because of side-effects (Roberts, 1996; Jackevicius et al., 2002; Pahor et al., 2000). Moreover, the drop in mortality for patients who continue on either statins or blood pressure drugs is quite small. Dr. Abramson does not address the failings of the antihypertensive drugs.

His complete avoidance of recommendations for any sort of alternative treatments or supplements, one hopes, was to maximize his credibility with mainstream medical opinion leaders, and to avoid alienating his Harvard Medical School colleagues.

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Only two other books I know of are in the same class for exposing the tricks of exaggerating the results of clinical trials: *The Cholesterol Myths* by Uffe Ravnskov, 2000; and *Calculated Risks* by Gerd Gigerenzer, 2002.

This book is well-written with an almost cheerful tone. It is easy to read with meaningful chapter headings, sections and subsections. It is very well referenced. The arrangement is chaotic, but builds steadily to a powerful conclusion.

I hope that *Overdo\$ed America* will join Marcia Angell's *The Truth About the Drug Companies*, 2004 and Merrill Goozner's *The \$800 Million Dollar Pill*, 2004, in staving off the medical industry's effort to grab half of the gross national product of the USA. Dr. Abramson's book will be a treasured reference for the rest of my life.

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