



Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant Case

Marcia Angell. WW Norton and Company, Inc., New York. 1996. \$35. ISBN 0-393-03973-0

Overall rating:	Excellent
Strengths:	Exposes the current breast implant situation and the various stakeholders; clearly describes the greed, ignorance, media distortion and blatant disregard for science that ultimately produced the case
Weaknesses:	Repetitive and slightly too simplistic at times
Audience:	Any physician interested in the need to adhere to science and the consequences of failing to do so; required reading for all first-year medical and epidemiology students

Dr. Marcia Angell, as executive editor of the *New England Journal of Medicine*, was drawn into the breast implant issue when she wrote 2 editorials on the subject. The first was published alongside an article by Dr. David Kessler, the commissioner of the US Food and Drug Administration (FDA), explaining his reasons for banning silicone-gel breast implants. The second accompanied the first epidemiologic study to determine whether breast implants increase the risk of certain diseases and symptoms.

And drawn into the breast implant issue she was. Contrary to her initial thoughts and expectations, she soon realized that the various stakeholders were not using scientific evidence to resolve this matter. She needed to understand why scientific evidence was not being used and the consequences for our society. She writes:

In the book, I will use the breast implant story to illustrate the broader themes that concern me. How do scientists reach conclusions about questions of health risks,

such as whether breast implants increase the chance of developing a disease? How does the legal system reach its conclusions about the same question? Do the differences in methods account for the vast difference in outcome? What are the essential distinctions in the way science, the law, and the public regard evidence, and what are the consequences for our society?

Angell achieves her objectives elegantly. She begins with a basic description of breast implants and their uses, followed by an explanation (but certainly not an endorsement) of why the FDA banned them. Shifting scenes, she describes the "tidal wave" of lawsuits that followed the FDA ban. She closes the factual portion with a description of the scientific process of collecting evidence, a discussion of the evidence to date (namely that "there was no evidence that breast implants cause connective tissue disease") and the experts' opinions that were used instead of scientific evidence in courtrooms across the US.

The author continues with why the different groups, including lawyers and the legal system as well as journalists and the media, reacted the way they did. The author firmly believes that the public has also rejected the need for scientific evidence to determine "truth from ideology," and she cites good examples of their change in behaviour and possible reasons for it.

Last, Angell describes the current situation. Kessler has now concluded that "we now have, for the first time, a reasonable assurance that silicone-gel implants do not cause a large increase in traditional connective tissue disease in women." Angell states that the lawyers, realizing that their initial claims of connective tissue diseases have been refuted, have moved on to less classic diseases, with the clear understanding that "the best diseases

are those that can't be defined, because they can't be studied systematically."

The author concludes by criticizing those who she feels have been most negligent, by suggesting a few solutions to rectify the nightmare and by highlighting the consequences to our society if we choose to ignore the lessons learned.

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Smoke and Mirrors: The Canadian Tobacco War

Rob Cunningham. 361 pp. Illust. International Development Research Centre, Ottawa. 1996. \$30.50. ISBN 1-088936-755-8

Overall rating:	Excellent
Strengths:	Tells an important story concisely and completely; well researched
Weaknesses:	Lack of explanation of inaction of Canadian health community for almost 3 decades
Audience:	Physicians, health educators, public health officials, politicians, officials and the public

Rob Cunningham has written an important book that chronicles the history of the tobacco industry and its foes. It is an outstanding overview of the tobacco problem in Canada and would serve as an excellent starting point for anyone interested in this issue. And it is even more valuable as a summary of the issue for those who do not require the detail that only a literature search can provide. Published last year by the International Development Research Centre in Ottawa, the book is lavishly illustrated with tobacco advertisements and many editorial car-



toons as well as numerous charts and graphs detailing tobacco production and consumption trends. It is extensively researched, with 650 references. It will appeal to anyone interested in public health, including physicians, health educators, public health officials, politicians and officials. Internationally, this book will appeal to those involved in tobacco control movements in other countries who wish to learn from the Canadian experience.

The book is divided into 7 parts. Part 1 consists of case histories of illnesses caused by tobacco, a summary of the health consequences of tobacco use and an outline of the major players in the Canadian tobacco industry. Part 2 looks at the early history of tobacco control. Part 3 contains a brief summary of the scientific evidence supporting a ban on advertising and sponsorship. There is detailed information on the campaign that resulted in the passage of the Tobacco Products Control Act and the legal battle that killed it. The tactics of the tobacco industry, including its marketing efforts directed at young people and women, are explored in Part 4. The history of tobacco growing in Canada is also outlined.

The efforts of the tobacco industry to export the epidemic to the rest of the world are examined in Part 5, along with the tragic consequences of this trend. The last 2 parts catalogue what actions should be taken, mainly by government, to reduce the incidence of diseases caused by tobacco. Cunningham's predictions are not always rosy, but they are usually realistic.

My only criticism of the book is that it lacks a more thorough discussion of the fact that it took almost 3 decades for the tobacco issue to be taken seriously. If we had started committing resources to eliminating tobacco in 1965, where would we be today? This is an unanswerable question, but it must be asked if we are to prevent similar public health catas-

trophes as we move into a new millennium.

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Neonatal Formulary 1996

9th ed. The Northern Neonatal Network. Edited by Edmund Hey. 199 pp. Illust. BMJ Publishing Group, London. 1996. Distributed in Canada by the Canadian Medical Association, Ottawa. \$51.95 (\$42.95 CMA members). ISBN 0-7279-1030-2

- Overall rating:** Fair
- Strengths:** Concise, uniform format; wide range of drugs listed
- Weaknesses:** Inadequate supporting references for therapeutic advice; lack of uniform information about drug interactions
- Audience:** Midwives, nurses, physicians and pharmacists

The *Neonatal Formulary* is a compendium of 156 drugs, vaccines and blood products used in perinatal units throughout the Northern Regional Health Authority in the United Kingdom. It is intended as a pocket guide for midwives, nurses, physicians and pharmacists involved in perinatal care.

The book is organized into 3 parts: the first contains generic advice about drug handling and administration, the second contains the 156 drug monographs and the third is a set of 1-paragraph summaries about the use of 53 drugs during breast-feeding. The strengths of this book are the uniform, concise structure of the monographs and the number of drugs covered.

However, there are some important weaknesses that limit the formulary's usefulness in Canada. Therapeutic advice is offered along with the basic information about each drug. However, with only 2 or 3 references

per monograph, the reader cannot distinguish between local and generally accepted practices. Also, the organization of the book by drug does not allow it to be used as a treatment guide. SI units for drug dosages are not consistently provided.

The most common questions asked in our pharmacy involve potential drug interactions and compatibility with intravenous solutions. I was disappointed, therefore, that these issues were not presented more clearly. For example, the erythromycin monograph contains a warning about its effect on theophylline metabolism, but the theophylline monograph does not contain a corresponding warning about erythromycin. The information provided about drug therapy during breast-feeding is limited.

Each perinatal unit should have a formulary that reflects local therapeutic and administrative practices. Additional resources are useful if they add value through critical reviews of the best available practices or through easy-to-use guides to drug use for patients who are exposed to multiple drugs. Although the *Neonatal Formulary* is very useful for the community in which it was created, it has important limitations in other countries.

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AUDIO CASSETTE

Meditations on Grief

Ann Silversides, 10 Dearbourne Ave., Toronto, ON M4K 1M7. 1996. \$22.60. ISBN 0-9681410-0-5

- Overall rating:** Very good
- Strengths:** Vivid portrayal of the experience of normal bereavement and the process of healing
- Weaknesses:** Abnormal patterns of be-