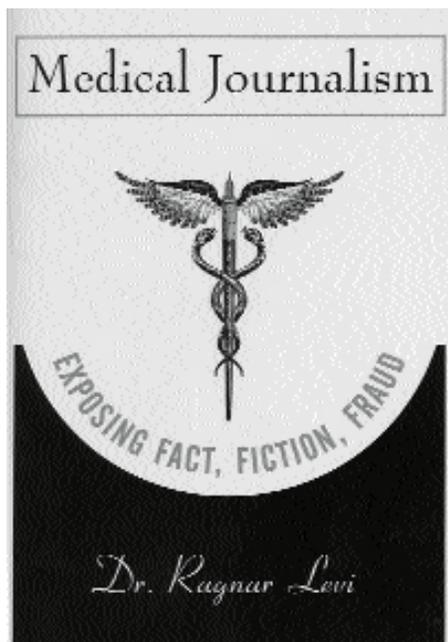


edited by Stephanie Deming



MEDICAL JOURNALISM: EXPOSING FACT, FICTION, FRAUD. RAGNAR LEVI. AMES, IOWA: IOWA STATE UNIVERSITY PRESS; 2001. 212 PAGES. SOFTCOVER \$34.95. ISBN 0-8138-0303-9.

There is little argument that any good medical journalist should approach a new research report with a healthy skepticism regarding its importance and place in the scientific literature. In *Medical Journalism: Exposing Fact, Fiction, Fraud*, Ragnar Levi challenges readers to go beyond simple skepticism and approach the scientific literature with an understanding of the criteria by which medical evidence should be judged.

The overall theme of the book could be summed up as “nothing is what it seems.” From publication bias to scientific fraud, Levi guides readers through every question that should be asked when evaluating evidence.

Levi sets the stage by describing who writes medical stories, where the headlines come from, how sources are found, and how medical stories are constructed. Readers are then briefed on the pressures under which a medical reporter must work—deadlines, potential conflicts of interest, pressure from editors, and a lack of interaction with the readers whose lives his or her reporting may affect.

In the third chapter, “Scientific Fact or Science Fiction”, Levi highlights five questions that should be asked of any research report: How was the hypothesis framed? What methods were chosen to test the hypothesis? How was the test carried out? How were the data analyzed and reported? How was the analysis interpreted? He then discusses seven major types of quantitative research studies. These lessons should help medical reporters move from simply asking questions to analyzing the strength of evidence themselves.

Levi also offers advice for criticizing research and remaining objective in the face of investigators’ enthusiasm about their work. We would be a perfectly healthy species if every statement like “This result/research/hypothesis may have implications for the prevention/diagnosis/treatment of disease” were true. Alas, many such claims are unfounded, and if journalists get swept up in the enthusiasm of researchers, they may be delivering false hope to their readers.

Levi says early on, “This book argues that the ‘he-said-she-said’ approach is insufficient in the context of medical science reporting” (p 34). The point is revisited in chapter 5 in a list of pitfalls in medical reporting. The usual suspects show up: allowing specialists to make generalizations for entire fields, relying on anecdotes in stories, failing to question findings about a treatment’s effects, and hyping a study’s clinical implications. Also in Levi’s list are two points that are not made often enough: numbers can often be misleading, and the research world is not the same as the real world. In his discussion of potentially misleading numbers, Levi focuses on statistical presentations of risk, which are all too often misinterpreted. He concludes: “Do not accept benefits (or risks) expressed as percentages unless you also know the absolute numbers” (p 62). A journalist who cannot interpret the numbers may overstate the effect of an intervention. Regarding the relevance of study findings to the real world, Levi notes that journalists should always be aware that researchers “may create such a special research situation that their study, even if well executed and randomized, no longer corresponds to everyday clinical practice” (p 65).

In a chapter titled “Critical Medical Journalism”, Levi expands the skepticism to medical reporting as a whole. Levi suggests potential red flags that should prompt special scrutiny of the credibility of claims, the scientific support of such claims, the strength of evidence, and personal biases. By the end of this chapter, readers might wonder whether any fact should ever be taken at face value.

In the penultimate chapter, “Some Challenging Topics”, Levi suggests several good avenues of exploration for investigative medical journalists and medical feature writers, including product claims, alternative medicine, scientific fraud, health policy, and research funding. Understanding and reporting on these topics can require a high level of expertise, but the resulting stories always have a timely news peg and can be educational

and exciting to write. The book wraps up with a chapter on using the Internet for reporting on health and medicine.

Throughout the book, Levi raises critical questions and key points. He relies heavily on the published literature (264 references) and on personal communication with a handful of seasoned medical journalists. Noticeably absent, however, are teachable moments and example scenarios. There are thousands of pitfalls in medical journalism, and there are plenty of visible examples of reporters who fell prey to such traps. But readers will find few such examples in this book. Also, Levi focuses mostly on the critical approach to interpreting evidence and offers little in the way of how to craft a story.

The book brings together valuable information that is well researched and clearly presented, but its intended audience is unclear. The novice medical reporter may be overwhelmed by the chapters on

what is normally taught in semester-long epidemiology and statistics courses; and the seasoned medical writer with a background in evidence-based medicine may find that the book duplicates texts already on his or her reference shelf. However, novices would benefit from using the book as a starting point for discussion in a classroom, and veterans may find it an approachable reminder of questions that should be asked about medical research.

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