

Suppression Bias at the *Journal of Occupational and Environmental Medicine*

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When the *Journal of Occupational and Environmental Medicine* rejected an article on corporate suppression of science on the grounds that the topic “was not a high priority” for journal readers, the author bought advertising space in *JOEM* to present his findings. The *JOEM* editor regretted he had not seen the ad to prevent its publication, and subsequently allowed the corporate-sponsored authors of a criticized study to respond to the advertisement. The editor then refused to allow the ad’s author to respond in turn, suppressing scientific information with the apparent intent of protecting the interests and profits of the corporate sponsor. A reputable journal has a responsibility to eschew corporate interests and work to uncover science hidden by interests that do not prioritize the pursuit of truth. *JOEM* needs to re-examine its priorities. *Key words:* scientific integrity; suppression bias; corporate influence; publication bias.

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Milton Friedman pointed out many years ago that “the [only] social responsibility of business is to increase profit,” and many agreed with him. Corporations’ desire to maximize profitability means that adverse health information has often been hidden from workers, customers, and the scientific community. Industry influence over scientific production becomes much more alarming when it is condoned, and even aided, by a respected occupational and environmental health journal. Peer-reviewed journals are supposed to function as the unbiased medium through which researchers exchange and critique each others’ ideas, experiments, and conclusions. Conflict-of-interest policies, peer-review procedures, and funding-disclosure rules are meant to assure authors and readers that journals are indeed functioning as neutral arbiters of important scientific research and discussion. However, experience shows that even well-known journals at times pursue an agenda that seems more favorable to corporate interests than to scientific integrity.

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Suppression Bias at JOEM

In the spring of 2003, I submitted an article entitled “Another Type of Publication Bias: Corporate Suppression of the Results of Adverse Research Findings” to the *Journal of Occupational and Environmental Medicine*. The article reviewed a publication bias, wherein Dow had repeatedly failed to publish its own research on the dangers of asbestos. While Dow (like other companies) frequently has the best and most current information about their own products’ toxicity, they often choose not to share that information with workers, customers, and the general public, especially when the studies reveal alarming health consequences. The Ethics and Philosophy Committee of the International Society for Environmental Epidemiology calls this a “Suppression (or, Oppression) Bias,” and defines the suppression of research as

the act of obstructing the conduct of a study or the release of its findings. It is unethical when imposed for reasons other than the concern for scientific validity and objectivity. However, Ethics Review Boards/Institutional Review Boards do have the charge of obstructing the conduct of a study that they deem as unethical. Research suppression operates at the interest group level such as from government, industry, the scientific community, or by any other group or individual with a vested interest in maintaining the status quo. Suppression can be motivated, for instance, by financial or ideological interests that a topic not be researched or reported on, or even by professional jealousy. Such acts deny the fundamental principle of advancing scientific knowledge, namely that of research in pursuit of the public health interest. Research suppression can lead to: (1) an absence of evidence; (2) bias in a purported risk factor-disease association in the literature; and (3) a decrease in the precision of that association’s estimate. Those serving to bring such acts or pressures to public view are considered to be whistle blowers.¹

This definition is useful to understand the actions of Dow and other corporations. It also unfortunately describes *JOEM*’s response to my article critiquing Dow.

Soon after I submitted the article, I received a message from *JOEM*’s editor, Dr. Paul Brandt-Rauf.² The Editor rejected this short article on his own, without any independent review. The rejection did not relate to any concerns with accuracy or method. Instead, the

Editor made a unilateral determination that the subject matter—corporate corruption of scientific research—was “not likely to be a high priority for the majority of *JOEM* readers.” I thought that this was an important question to explore.

Accordingly, I purchased a two-page ad in the June 2003 issue of *JOEM*, the official journal of the American College of Occupational and Environmental Medicine (ACOEM). The ad included the entire text of the rejected manuscript, coupled with a brief questionnaire asking readers whether they agreed with the Editor’s statement that this type of material was not a “high priority.” I received 33 responses from readers affirming that the corporate manipulation of science is a topic that occupational and environmental health journals should cover. This is about one percent of the entire membership of the ACOEM. Not a single response supported the Editor’s position.

On August 5, 2003, the Editor posted a letter to *JOEM*’s readership on the journal’s Web site, <www.joem.org>. His letter did not address the question of *JOEM*’s priorities. Instead, he revealed *JOEM*’s desire to keep this article out of print:

The advertisement that Dr. Egilman paid for should have been reviewed by me before publication, but through an inadvertent oversight at our publisher, Lippincott Williams & Wilkins, I did not review the advertisement before it was published. Had it been sent to me for review, I would have rejected it.^{3*}

Leaving aside the question of whether the Editor’s initial rejection of the article without independent review was appropriate, his willingness to prevent my article from appearing in *JOEM as an advertisement* is even more troublesome. Presumably, the Editor approves many advertisements that are not of interest to many journal readers. It appears as if he would have prevented the publication of this article-*cum*-advertisement not from lack of reader interest, but rather to prevent public criticism of journal policy or of Dow.

The Editor clearly felt his readership had enough interest in the topic to allow Dow representatives space to respond to my advertisement in the September 2003 issue of *JOEM*. Dow scientists Carol Burns and Richard Kociba authored a response to my letter.⁴ I was not allowed to respond, nor was I permitted to purchase space for a rebuttal. I provide my response here. Much of their letter focused on defending a study on worker mortality I had criticized in the advertisement. However, they did not address the key problems with the study.

*It should be noted that I followed all appropriate channels for submitting the piece as both an article and an advertisement. The piece was accepted as an advertisement after, as I understand, another advertiser withdrew at the last minute. The publisher staff seemed very pleased to have another piece to fill the empty space. I at no time misrepresented myself or the nature of the advertisement.

The study, published as “Cause-specific mortality among employees of a Texas-based chemical manufacturing facility, 1940 through 1996” in the journal *Texas Medicine*, underestimates and downplays occupational disease caused by Dow.⁵ Most incredibly, the investigators claimed that 11 mesotheliomas found among Dow workers “do not suggest an occupational etiology.” The study was conducted in a plant that not only had thousands of feet of pipes covered in asbestos insulation, but also used thousands of tons of asbestos in the chlorine-production process. The incidence rate for mesothelioma is no more than 1–2 per million. Given these facts, most scientists would conclude that 11 mesotheliomas within a worker population is overwhelming evidence of occupational etiology. In their response, Burns and Kociba assert they made “no such claim” that the diseases “do not suggest an occupational etiology,” but the language is a direct quote from their abstract.^{4,5}

Another problem with the study is that it did not take subcontractors into account.⁶ These workers, whom Dow refers to as “spares,”⁷ have some of the highest exposures of all plant workers, yet are intentionally excluded from studies of “Dow workers” because they are not technically employees of the company. In their response, Burns and Kociba defend this decision, stating it is typical practice. We agree. Worker cohorts in corporate studies rarely include subcontractors precisely because they often have higher exposures and hence higher rates of disease. But the fact that excluding these workers is common practice does not make it good practice.

Finally, Dow has not shared the outcome of this study with the affected workers, be they regular workers or subcontractors.⁶ Burns and Kociba state that workers were informed of the study results *before* its publication. However, Union business manager and Dow worker Charlie Singletary confirms that Dow never shared the results of the study with workers at his plant, one of the plants studied:

I, [as] Business Manager of Local 564 International Union of Operating Engineers in Freeport Texas, have never been informed by the Company of any cancer survey or results of such involving our members. Nor do I have any knowledge of the company informing any other union official or members of the union of such a survey.⁸

This business manager sent this information to the editor of *JOEM* but he refused to publish it either, thus allowing Dow’s lie to go unchallenged.

The Priorities of Science

The Editor’s failure to print both my original article and Mr. Singletary’s response constitutes suppression bias. But it appears that this bias does not only consist

of failure to publish important material. On the contrary, it can include the publication of studies that promote corporate interest but do not meet peer-review criteria. For example, Dr. Patricia Buffler of the University of California at Berkeley and Dr. Michael Kelsh of Exponent published a study titled "Primary Congenital Hypothyroidism, Newborn Thyroid Function and Environmental Perchlorate Exposure among Residents of a Southern California Community" in *JOEM* in 2003. Lockheed, a major user of perchlorate, funded the study, which reported that "residence in a community with potential perchlorate exposure has not impacted PCH rates or newborn thyroid function."⁹ The *JOEM* sent an e-mail rejecting the article. But after Buffler, a member of the journal's editorial board, contacted the Editor, he told her the rejection was an "error," and she should "forget what had transpired." According to Buffler, "I did as I was requested, 'to forget that,' and I destroyed whatever I had from those earlier communications."¹⁰ She also "requested that [Dr. Kelsh] provide me with all of that, and not maintain any copies of that." She explained her action by stating that the rejection letter was "an error;" and that because of a "personal situation" that the editor had experienced, "I wanted to protect his confidence. I wanted to protect his position in this."

Corporate scientists and their consultants often work behind a wall of secrecy erected to protect corporate interests. This wall of secrecy is the antithesis of what science *should* be: an ongoing open process in which theses and data are open to examination, critique, and re-examination. Science should also serve the good of all humanity, not enrich a few at the expense of the many. Not only are they biased against the publication of certain results, but their priorities clearly place profits over truth, the corporation over people. Perhaps this is what we must expect from a corporation.

The priorities of a journal such as *JOEM* are a different matter. The journal is the organ of the American College of Occupational and Environmental Medicine, a group dedicated to "promoting the health of workers through preventive medicine, clinical care, research and education."¹¹ Such a journal should eschew corporate interests, and actively work to uncover science hidden by interests that do not prioritize the pursuit of truth. Instead, the journal has chosen to contribute to the obfuscation of information harmful to Dow, but vital to many workers' health. *JOEM* must re-examine its priorities if it is to secure a place as an important publication in the field of occupational and environmental health.

References

1. Soskolne C. Request for Comments—Proposed Definitions Relating to (1) Suppression of Research (2) Repression of Research. International Society for Environmental Epidemiology, February 11, 2002. <www.iseepi.org/index1.htm>. Accessed January 31, 2005.
2. Spraycar M. E-mail, *JOEM* Manuscript #990627. May 15, 2003.
3. Brandt-Rauf PW. From the Editor. <www.joem.com>, August 5, 2003.
4. Burns CJ, Kociba R. Dow Chemical Scientists Respond to Allegations of Suppression of Research Results. *J Occup Env Health*. 2003;45:914-5.
5. Burns CJ, Carson ML, Cartmill JB. Cause-specific mortality among employees of a Texas-based chemical manufacturing facility, 1940–1996. *Texas Med*. 2003;99:67-73.
6. Tipp R. Personal communication, May 18, 2003.
7. Asbestos Use—Status in Texas Division. Dow Chemical, October 14, 1970.
8. Singletary C. International Union of Operating Engineers, communication, October 26, 2003.
9. Kelsh MA, Buffler PA, Daaboul JJ, et al. Primary congenital hypothyroidism, newborn thyroid function and environmental perchlorate exposure among residents of a Southern California community. *J Occup Environ Med*. 2003;45:1116-27.
10. Buffler PA. Deposition. In re: Redlands Tort Litigation. Superior Court of the State of California for the County of San Bernardino. No. RCV 31496.
11. Society information. <<http://www.joem.org/pt/re/joem/societyinfo.htm?jsessionid=B2D13aC7py9BNbTQn8AEImxTCzaS6MANmD2d1VYDOFkL10YF83I!113108930!-949856032!9001!-1>>. Accessed October 20, 2004.