

## Letter to the Editor

### Comment on: Ogden T (2009) ‘Data sharing, Federal Rule of Evidence 702, and the Lions in the Undergrowth’

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In his commentary, ‘Data Sharing, Federal Rule of Evidence 702, and the Lions in the Undergrowth’, the chief editor of the *Annals of Occupational Hygiene (AOH)* questions the view that industry-funded research presents a particular threat to public health policy (Ogden, 2009). This flies in the face of two books discussed in Ogden’s commentary—*Defending the Indefensible: The Global Asbestos Industry and Its Fight for Survival* by McCulloch and Tweedale and *Doubt Is Their Product: How Industry’s Assault on Science Threatens Your Health* by David Michaels. Both books expose a disturbing history of how the tobacco, asbestos, and other industries, through the use of industry-funded scientists and through industry-sponsored research, have systematically suppressed and distorted scientific evidence so as to create doubt about harms caused by their products, thereby influencing governments, through a mechanism of fomenting uncertainty, to not act to protect public health in spite of overwhelming independent evidence showing that action was indeed well justified (McCulloch and Tweedale, 2008; Michaels, 2008).

In his commentary, Ogden does not address this issue. Instead, he focuses on another issue, stating that ‘Work funded by industry is not always wrong, papers from other sources are not always free from bias’. While this is true, it is also irrelevant since no such assertion has been made. His argument avoids the fundamental public health issue at hand, namely whether multi-billion-dollar industries are succeeding in subverting public health policy through industry-funded research, causing large numbers of people to suffer harm and loss of life. This is a serious and valid issue, deserving of a direct and relevant response, as opposed to a misleading distraction.

This misrepresentation of the issue is reminiscent of the way F.D.K. Liddell, in his 1997 *AOH* guest editorial (discussed in Ogden’s commentary), attempted

to discredit scientists such as Irving J. Selikoff for drawing attention to the health threat posed by asbestos (Liddell, 1997). Liddell accused these scientists of saying that ‘all workers ever exposed to asbestos will die prematurely of asbestos-related disease’. They had, of course, said no such thing.

Michaels’ book documents how product defence firms, run by scientists, provide research tailored specifically to assist industries win court cases. For example, Egilman and Bohme (2006) cite court documents showing that between 2001 and 2006, as part of their litigation strategy to convince juries to dismiss mechanics’ claims for compensation for asbestos diseases from exposure to asbestos-containing brake linings, General Motors, Ford, and Chrysler sought out and paid more than \$23 million to Exponent and ChemRisk mainly to re-analyse previously published research. Under the heading ‘Technical Support—Asbestos Litigation’, the scientists billed the car companies for research such as ‘Completion of Meta-analysis’ and ‘Presentation of Mechanic Meta-analysis’ to scientific conferences. Car, truck, and vehicle equipment manufacturer defendants have similarly sponsored air monitoring studies purporting to show that mechanics’ exposures to asbestos are trivial; these studies tend sometimes to exclude crucial information that would be damaging to the industry’s litigation: for example, exposure levels during such activities as the grinding of brake parts.

Clearly, the car companies are ordering and funding research, not driven by any altruistic commitment to advance independent scientific knowledge but rather to advance their litigation goals and to avoid paying billions of dollars in compensation (Michaels and Monforton, 2007).

The auto and heavy equipment manufacturers will likely feel that their money was well spent on seeing the *AOH*’s recent publication of several articles on

the research they financed to support their litigation (Madl *et al.*, 2008, 2009), as well as Ogden's defence of such industry-financed research.

Ogden acknowledges the evidence that shows a much higher likelihood of industry-favourable results when industry funds research. He then formulates a theory that suggests independent scientists may be responsible for this trend: 'Although the obvious interpretation is that industry is biased towards publications that did not show any ill effect from its products, a more important reason may be bias of non-industry researchers in publishing positive studies, which attract more interest, are probably more cited, and may therefore be more likely to be accepted by journals than negative studies.'

Ogden provides no evidence for his novel hypothesis while substantial evidence exists to the contrary, including the pharmaceutical industry's influence in medical journals (Davidson, 1986; Glantz *et al.*, 1996; Markowitz and Rosner, 2002; Als-Nielsen *et al.*, 2003; Bekelman *et al.*, 2003; Krimsky, 2003; Friedman and Richter, 2004; Smith, 2005). In his commentary, he asserts that non-industry-funded research may be flawed by some systemic, undocumented subconscious bias to come up with findings that show harm. Such research, Ogden claims, is as equally untrustworthy as industry-funded research. That is quite a major allegation riding on a speculative untested hypothesis. We suggest that such a significant problem of widespread bias, if it existed, would have been documented by a body of evidence as substantial as the evidence of bias and outright corruption in industry-funded research documented by both Michaels and McCulloch and Tweedale.

While Ogden sees no special problem with publishing industry-funded product defence research, others working in the field of public health are less sanguine (ICMJE, 2007, 2009). In Quebec itself, where the asbestos industry has spent millions financing research projects that purport to show chrysotile asbestos poses little threat to health, 15 doctors, toxicologists, occupational hygienists, and epidemiologists from Quebec universities and public health agencies recently issued a public statement entitled 'Stop the lies about asbestos' (Gosselin *et al.*, 2009). They challenged the science 'that the industry has bought from "experts" on its payroll' and pointed out that 11 research reports since 2003 published by the National Public Health Institute of Quebec (INSPQ) have proven that, contrary to what industry-funded research asserts, the safe use of chrysotile asbestos is a myth, even in

an affluent technologically advanced society like Quebec. The INSPQ has now published 15 reports documenting failure by Quebec to protect workers and the public from harm from chrysotile and other asbestos. (These are reports numbers 222, 233, 250, 293, 393, 616, 651, 815, 927, 942, 953, 954, 968, 986, and 1002. Reports numbers 292, 342, 394, and 955 are English translations of four of these reports. All are downloadable from <http://www.inspq.qc.ca/publications/default.asp?E=p>.) Other researchers have exposed the damaging toll on public health from the influence of asbestos-industry-funded research (Egilman *et al.*, 2003; Stayner, 2008; Pezerat, 2009).

The World Health Organization (WHO) has stated that research funded by the tobacco industry 'has been used strategically to supply apparently independent reports that were in fact commissioned for the purpose of opposing tobacco control policy.' (WHO, 2008b). Consequently, the WHO Framework Convention on Tobacco Control specifically requires countries to protect their public health policy from commercial and other vested interests allied with the tobacco industry (WHO, 2008a).

Because of his work for the tobacco industry in 1988, which he asked to be kept secret, but which was later revealed in court documents (McDonald, 1988), Corbett McDonald would likely be excluded from any research on tobacco by the WHO. McDonald, who was an assistant editor for *AOH* from 1998 to 2002, is perhaps better known in the current context as the leader of the McGill scientists who were long supported by the asbestos industry and who were discussed in Ogden's commentary. Similarly, concerns are warranted when papers are published in scientific journals, such as the *AOH*, by product defence consulting firms, whose writings were initiated by, funded by, and for the defence of corporations facing liability and regulation over their products.

There is a legitimate question as to whether such papers should, in principle, be accepted for publication. Given that science advances through refutation and thus can perhaps benefit from some such papers, we suggest at a minimum that journal editors should ask authors to disclose if papers submitted were done at the behest of and with financing from attorneys or corporations facing litigation or regulation. If the journal decides to publish the paper, these facts should be disclosed to readers. In addition, such papers would warrant at least equally careful review for design and other potential biases and omissions as what publicly funded research requires, if only for the reasons outlined above.

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## REFERENCES

- Als-Nielson B *et al.* (2003) Association of funding and conclusions in randomized drug trials. *J Am Med Assoc*; 290: 921–5.
- Bekelman JE, Li Y, Gross CP. (2003) Scope and impact of financial conflicts of interest in biomedical research. *J Am Med Assoc*; 289: 454–63.
- Davidson RA. (1986) Source of funding and outcome of clinical trials. *J Gen Int Med*; 1: 155–8.
- Egilman D, Fehnel C, Bohme SR. (2003) Exposing the “myth” of ABC, “anything but chrysotile”: a critique of the Canadian asbestos mining industry and McGill University chrysotile studies. *Am J Ind Med*; 44: 540–57.
- Egilman DS, Bohme SR. (2006) Scientific method questioned. (in reply). *Int J Occup Environ Health*; 12: 292–3. Available at [http://www.ijoe.com/index.php/ijoe/article/view/186/148](http://www.ijoeh.com/index.php/ijoe/article/view/186/148). Accessed 18 January 2010.
- Friedman LS, Richter ED. (2004) Relationship between conflicts of interest and research results. *J Gen Int Med*; 19: 51–4.
- Glantz SA *et al.* (1996) *The cigarette papers*. Berkeley, CA: University of California Press.
- Gosselin P *et al.* (2009) *Cessons le mensonge*. La Presse. Available at <http://www.cyberpresse.ca/opinions/forums/200909/16/01-902224-cessons-le-mensonge.php>. Accessed 18 January 2010.
- ICMJE. (2007) Sponsorship, authorship, and accountability. Available at [http://www.icmje.org/update\\_sponsor.html](http://www.icmje.org/update_sponsor.html). Accessed 18 January 2010.
- ICMJE. (2009) Uniform format for disclosure of competing interests in ICMJE journals (editorial). Available at <http://www.icmje.org/format.pdf>. Accessed 18 January 2010.
- Krimsky S. (2003) *Science in the private interest*. New York: Rowman & Littlefield Publishers, Inc.
- Liddell FDK. (1997) Magic, menace, myth and malice (editorial). *Ann Occup Hyg*; 41: 3–12.
- Madl AK *et al.* (2008) Exposure to chrysotile asbestos associated with unpacking and repacking boxes of automobile brake pads and shoes. *Ann Occup Hyg*; 52: 463–79.
- Madl AK *et al.* (2009) Airborne asbestos concentrations associated with heavy equipment brake removal. *Ann Occup Hyg*; 58: 839–57.
- Markowitz GE, Rosner D. (2002) *Deceit and denial: the deadly politics of industrial pollution*. Berkeley, CA: University of California Press.
- McCulloch J, Tweedale G. (2008) *Defending the indefensible: the global asbestos industry and its fight for survival*. Oxford, UK: Oxford University Press.
- McDonald JC. (1988) Letter to Dr Dunn, Imperial Tobacco Limited. Montreal, Canada: Legacy Tobacco Documents Library at UCSF. Available at <http://legacy.library.ucsf.edu/action/search/basic;jsessionid=D2D83243DC24EB94D13793124B72B0F5?fd=0&q=300501058>. Accessed 18 January 2010.
- Michaels D. (2008) *Doubt is their product: how industry’s assault on science threatens your health*. New York: Oxford University Press.
- Michaels D, Monforton C. (2007) How litigation shapes the scientific literature: asbestos and disease among automobile mechanics. *J Law Policy*; 15: 1137–69.
- Ogden T. (2009) Data sharing, Federal Rule of Evidence 702, and the lions in the undergrowth. *Ann Occup Hyg*; 53: 651–55.
- Pezerat H. (2009) Chrysotile biopersistence: the misuse of biased studies. *Int J Occup Environ Health*; 15: 102–6.
- Smith R. (2005) Medical journals are an extension of the marketing arm of pharmaceutical companies. *PLoS Med*; 2: e138. Available at [www.plosmedicine.org](http://www.plosmedicine.org). Accessed 18 January 2010.
- Stayner LT. (2008) Canada, chrysotile and cancer: Health Canada’s Asbestos International Expert Panel report. *J Occup Environ Med*; 50: 1327–8.
- WHO. (2008a) Guidelines for implementation Article 5.3, Article 8, Article 11, Article 13. See protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry. Geneva, Switzerland: World Health Organization. pp. 13–5. Available at [http://whqlibdoc.who.int/publications/2009/9789241598224\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241598224_eng.pdf). Accessed 18 January 2010.
- WHO. (2008b) Tobacco industry interference with tobacco control. Geneva, Switzerland: World Health Organization. pp. 10. Available at [http://whqlibdoc.who.int/publications/2008/9789241597340\\_eng.pdf](http://whqlibdoc.who.int/publications/2008/9789241597340_eng.pdf). Accessed 18 January 2010.