Industry involvement in continuing medical education

Time to say no

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The pharmaceutical and medical device industries fund a substantial portion of the continuing medical education (CME) of physicians in Canada. Along with this financial support come avenues for industry influence.[1,2] Continuing medical education organizers are often under overt pressure to design sessions and choose faculty[3] to attract industry funding. Organizers might also be affected by more subtle tactics. Research in social science demonstrates that the recipient of a gift feels a sense of obligation that is often subconscious.[4]

This might cause CME organizers to respond in predictable and accommodating ways to sponsorship from industry. The conflicts of interest CME faculty (organizers and speakers) have with industry likely also have an effect on CME content.[5] Whatever the mechanism, CME with industry involvement has a narrower range of topics and more drug-related content than CME without direct industry involvement.[6] Even when funding is unrestricted (course content and faculty are determined by the program director, not industry), the content favours the sponsor's product.[7]

Few dispute that the bias introduced by industry involvement in CME affects physician prescribing.[8] And, as stated by the US Senate Finance Committee in 2007, "it seems unlikely that this sophisticated industry would spend such large sums on an enterprise but for the expectation that the expenditures will be recouped by increased sales."[9] The real question is whether industry's influence is harmful. Most agree that industry's primary objective of increasing sales[10] creates an inherent tension with the physician's goal of getting the best medical information.

Some physicians have argued that despite this conflict, they can still accept the benefits of industry funding; they have the ability to accurately detect bias and distil out truth. However, studies contradict this. Physicians who interact more often with industry have poorer prescribing habits and are less likely to follow guidelines.[11] Some of the most damning evidence of harm comes from a retrospective analysis of the "OxyContin crisis" by Van Zee.[12] The analysis clearly demonstrates how industry influence over physician prescribing can have devastating outcomes. In 1996, Purdue's launch of OxyContin involved the creation of a speakers' bureau with thousands of physicians and, between 1996 and 2002, the sponsorship of more than 20 000 educational programs. The educational sessions were driven and funded by the pharmaceutical company, led by industry-sponsored physicians, and accredited by professional bodies. Purdue achieved unprecedented success. In the United States, OxyContin sales grew from $48 million (US) in 1996 to almost $1.1 billion (US) in 2000. However, the educational information Purdue disseminated on OxyContin misrepresented the risk of addiction and abuse.[13-15] The unprecedented success was accompanied by an epidemic of OxyContin-related harms. Unfortunately, the OxyContin "commercial triumph, public health tragedy" story is not unique; there are many other reports of poor patient outcomes as a result of industry involvement in CME in other drug classes.[16]

As a result, many are calling for a ban on industry sponsorship of CME and a divestment of conflicts of interest from CME faculty.[17] To move forward with these changes, academic centres and professional medical associations (PMAs) are looking to their physician members for support and direction. Unfortunately, it might be difficult for physicians to see how their interactions with industry can adversely influence them. When researchers presented physicians with proposed conflict-of-interest regulations that would apply to them, they were much more resistant than when the identical scenario referred to financial planners. Financial planners showed the same self-interest in this study; they were more likely to oppose conflict-of-interest regulations when the scenario referred to financial planners than when it referred to physicians.[18] Studies on decision making from the social science field indicate that this self-interest is unintentional and unconscious. Even when individuals are instructed about self-serving bias and are motivated to remain objective, they are unable to do so.[19]

Where we are in Canada

Ongoing medical education is clearly essential for physicians. However, unlike for undergraduate and postgraduate medical education, there are no streams of revenue for CME in Canada. Industry, with a fistful of money, has eagerly stepped into this void. At present, industry funds accredited CME in Canada and contributes to organizations that produce CME programs for hospitals, PMAs, and universities. Financial conflicts of interest with industry are likely prevalent among Canadian CME faculty as well.[20]

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Industry is also involved in CME development in Canada. The Royal College of Physicians and Surgeons of Canada (RCPSC) permits industry to co-develop CME with the physician organization, but prohibits industry representatives from sitting on scientific planning committees.[21] The College of Family Physicians of Canada (CFPC) has recently changed its policy; its 2012 fall continuing professional development newsletter stated that, starting in January 2013, industry would not be permitted to attend CME content planning meetings nor be allowed to "have any role" in CME program content development.[22] The current CFPC guidelines reflect this statement.[23] University policies adhere to the guidelines from the colleges and allow industry involvement in CME development but prohibit industry representatives from sitting on the scientific planning committees. University policies also permit industry to direct unrestricted funds to specific CME events.[24-26]

What should be done

Industry involvement in CME. Ideally, Canadian academic centres, hospitals, and PMAs should ban all industry involvement (including funding) in CME. Several American institutions have taken this route with success, including the University of Michigan, the Memorial Sloan Kettering Cancer Center, the Brody School of Medicine at East Carolina University, the Kaiser Permanente in the Mid-Atlantic States region, and the Oregon Academy of Family Physicians.[27,28]

At a minimum, Canadian organizations should do what some American institutions have done and only allow industry to contribute unrestricted funding to a central pool within the larger organization.[29] An independent medical body disperses the pool of money to pay for CME events. Industry is not allowed to participate in the planning, development, or delivery of CME. Although many find this "firewall" approach appealing (and one study found it to be effective[6]), it might still engender subconscious reciprocity.[4] As well, organizations could feel pressure to adopt industry-friendly policies and programs to attract funding.[9]

The CFPC and the RCPSC should implement a 5-year plan to only accredit CME programs that do not have funding from industry. As a first step, the colleges should prohibit industry involvement in the planning, development, and delivery of CME, not just the educational component. They should explicitly state in their guidelines that industry is not permitted to suggest speakers or content to the planning committee.

Faculty conflicts of interest. The simplest solution is to prohibit physicians with financial conflicts of interest from planning or teaching CME. The US Accreditation Council on Continuing Medical Education did recommend this in 2003. However, the proposal died early on, as many believed this would "empty lecterns and podia across the continent,"[30] and regulators continued to focus on transparency. Unfortunately, disclosure has substantial limitations and might increase bias,[31-33] so divestment is back in the spotlight. Some American institutions have moved forward on this; 44 medical schools now "ban or severely restrict" faculty participation in speaker bureaus.[34] Harvard University has set financial limits for conflicts of interest for its faculty.[35] Many schools also limit and regulate faculty consulting relationships with industry. Canadian academic institutions, hospitals, and PMAs should follow the lead of these institutions and ban faculty from participating in speaker bureaus. They should also set financial limits on faculty conflicts of interest and regulate consulting relationships. The CFPC and the RCPSC should develop 5-year plans to only accredit CME programs that have faculty without personal income from industry.[36] A goal of zero payments is important because even a small financial payoff can distort a recipient's judgment.[19] They should also develop a policy to address financial conflicts of interest that fall outside personal payments from industry, such as industry funding of a physician's research. And finally, they need a policy to address nonfinancial conflicts of interest (personal, political, ideological, religious, etc) for CME faculty.[37]

Maintaining CME without industry support

Physicians frequently express concern that we will not be able to maintain the quality and quantity of CME without industry support. To address this, some have suggested "rethinking continuing medical education."[38] The large conferences at expensive venues are a poor way to deliver CME. The most effective (and more cost-effective) CME is held in small groups, with practice audits, ongoing support, and follow-up. Organizations could further reduce costs by offering CME in local community hospitals and clinics or online. As well, professional associations, such as the CFPC, could develop educational objectives or a standard curriculum. Currently, the development of CME is haphazard and is often determined by industry funding. Implementing these suggestions would lead to higher-quality CME and cost savings. Second, programs will have to find alternative sources of funding. Physicians could pay more in fees. The pharmaceutical and medical device industry could pay a CME tax. For instance, France levies a 1.6% tax on industry to fund CME programs.[39]

The public health care system could cover more costs. At present, the public already pays the higher drug costs passed on from industry sponsorship of CME. Public funding of CME might eventually lead to drug cost savings for the public. With the loss of industry influence, doctors will begin to prescribe more appropriately. They will eschew more expensive "me-too" drugs in favour of the

cheaper, older medications with proven outcomes and established safety profiles.

Conclusion

The involvement of the pharmaceutical and medical device industries in the provision of CME has a harmful influence on physician prescribing practices. Current measures to limit industry's influence are inadequate. Academic centres, hospitals, and PMAs need to demonstrate leadership. They should start by limiting industry involvement in CME and restricting faculty conflicts of interest. The RCPSC and the CFPC should develop a 5-year plan to only accredit CME with no industry funding and with faculty with no conflicts of interest. Continuing medical education can be funded through alternative means such as physician payments and public funding. Overall CME costs can be reduced, and delivery improved, with a change in the way CME is approached. Ultimately, limits on industry involvement will improve physician prescribing and patient outcomes, at a lower cost to the public.

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Competing interests
None declared

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References

1. Morris L, Taitsman JK. The agenda for continuing medical education—limiting industry's influence. *N Engl J Med* 2009;361(25):2478-82.
2. Steinman MA, Baron RB. Is continuing medical education a drug promotion tool? Yes [Debates]. *Can Fam Physician* 2007;53(10):1650-3 (Eng), 1654-7 (Fr).
3. Moynihan R. Doctors' education: the invisible influence of drug company sponsorship. *BMJ* 2008;336(7641):416-7.
4. Katz D, Caplan AL, Merz JF. All gifts large and small: toward an understanding of the ethics of pharmaceutical industry gift-giving. *Am J Bioeth* 2010;10(10):11-7.
5. Wang AT, McCoy CP, Murad MH, Montori VM. Association between industry affiliation and position on cardiovascular risk with rosiglitazone: cross sectional systematic review. *BMJ* 2010:18(1):c1344.
6. Katz HP, Goldfinger SE, Fletcher SW. Academia-industry collaboration in continuing medical education: description of two approaches. *J Contin Educ Health Prof* 2002;22(1):43-54.
7. Bowman MA. The impact of drug company funding on the content of continuing medical education. *Mobius* 1986;6(1):66-9.
8. Tabas JA, Boscardin C, Jacobsen DM, Steinman MA, Volberding PA, Baron RB. Clinician attitudes about commercial support of continuing medical education: results of a detailed survey. *Arch Intern Med* 2011;171(9):840-6.
9. US Senate Finance Committee. *Committee staff report to the chairman and ranking member: use of educational grants by pharmaceutical manufacturers.* Washington, DC: US Government Printing Office; 2007.
10. Gøtzsche PC. Big pharma often commits corporate crime, and this must be stopped. *BMJ* 2012;345:e8462.
11. Spurling GK, Mansfield PR, Montgomery BD, Lexchin J, Doust J, Othman N, et al. Information from pharmaceutical companies and the quality, quantity, and cost of physicians' prescribing: a systematic review. *PLoS Med* 2010;7(10):e1000352.
12. Van Zee A. The promotion and marketing of OxyContin: commercial triumph, public health tragedy. *Am J Public Health* 2009;99(2):221-7. Epub 2008 Sep 17.
13. Meier B. In guilty plea, OxyContin maker to pay $600 million. *New York Times* 2007 May 10. Available from: **www.nytimes.com/2007/05/10/business/11drug-web.html**. Accessed 2014 Jun 23.
14. Persaud N. Questionable content of an industry-supported medical school lecture series: a case study. *J Med Ethics* 2014;40(6):414-6. Epub 2013 Jun 11.
15. Jovey RD, editor. *Managing pain. The Canadian healthcare professional's reference*. Toronto, ON: Healthcare & Financial Publishing, Rogers Media; 2002.
16. Carlat D. Diagnosis: conflict of interest. *New York Times* 2007 Jun 13. Available from: **www.nytimes.com/2007/06/13/opinion/13carlat.html**. Accessed 2014 Jun 23.
17. Kerridge I. Pharmaceutical industry support for continuing medical education: is it time to disengage? *J Paediatr Child Health* 2011;47(10):690-2.
18. Sharek Z, Schoen RE, Loewenstein G. Bias in the evaluation of conflict of interest policies. *J Law Med Ethics* 2012;40(2):368-82.
19. Dana J, Loewenstein G. A social science perspective on gifts to physicians from industry. *JAMA* 2003;290(2):252-5.
20. Neuman J, Korenstein D, Ross JS, Keyhani S. Prevalence of financial conflicts of interest among panel members producing clinical practice guidelines in Canada and United States: cross sectional study. *BMJ* 2011;343:d5621.
21. Royal College of Physicians and Surgeons of Canada. *Guidelines and process for co-development with a nonaccredited physician organization*. Ottawa, ON: Royal College of Physicians and Surgeons of Canada. Available from: **www.royalcollege.ca/portal/page/portal/rc/members/cpd/cpd_accreditation/group_learning/guidelines_nonphysician_organization**. Accessed 2013 May 19.
22. Department of Continuing Professional Development, College of Family Physicians of Canada. Commercial involvement and program development. *CPD in Focus* 2012;4(5):2.
23. College of Family Physicians of Canada. *A guide to Mainpro® accreditation*. Mississauga, ON: College of Family Physicians of Canada; 2014. Available from: **www.cfpc.ca/uploadedFiles/CPD/A%20Guide%20to%20Mainpro%20Accreditation.pdf.** Accessed 2014 Jun 23.
24. Continuing Education Program. *Policy on support of continuing education events from commercial sources.* Hamilton, ON: McMaster University Health Sciences; 2007. Available from: **http://fhs.mcmaster.ca/conted/documents/PolicySupportofCEEventsfromCommercialSources10.pdf**. Accessed 2014 Jun 2.
25. Office of Continuing Education and Professional Development. *Policy on sponsorship from commercial sources of University of Toronto accredited continuing education activities.* Toronto, ON: University of Toronto Faculty of Medicine; 2012. Available from: **www.cpd.utoronto.ca/brochures/Sponsorship-Policy-2012.pdf**. Accessed 2014 Jun 23.
26. Faculty of Medicine, Division of Continuing Professional Development. *Guidelines for commercial support of continuing medical education/continuing professional development activities.* Vancouver, BC: University of British Columbia; 2009. Available from: **http://ubccpd.ca/sites/ubccpd.ca/files/UBCCPD-Guidelines-for-Commercial-Support.pdf**. Accessed 2014 Jul 15.
27. Carlat DJ. *University of Michigan bans industry funded CME.* Newburyport, MA: The Carlat Psychiatry Blog [website]; 2010 Jun 28. Available from: **http://carlatpsychiatry.blogspot.ca/2010/06/university-of-michigan-bans-industry.html**. Accessed 2014 Jun 23.
28. Carlat DJ. *Oregon Academy of Family Physicians to industry: hands off our CME!* Newburyport, MA: The Carlat Psychiatry Blog [website]; 2008 Mar 11. Available from: **http://carlatpsychiatry.blogspot.ca/2008/03/oregon-academy-of-family-physicians-to.html**. Accessed 2014 Jun 23.
29. Richter R. School restricts industry funding of CME courses. *Stanford Medicine News Center* 2008 Oct 9. Available from: **http://med.stanford.edu/news/all-news/2008/09/school-restricts-industry-funding-of-cme-courses.html**. Accessed 2014 Jun 23.
30. Marlow B. The future sponsorship of CME in Canada: industry, government, physicians or a blend? *CMAJ* 2004;171(2):150-1.
31. De Melo-Martín I, Intemann K. How do disclosure policies fail? Let us count the ways. *FASEB J* 2009;23(6):1638-42. Epub 2009 Jan 28.
32. Kassirer JP. Disclosure's failings: what is the alternative? *Acad Med* 2009;84(9):1180-1.
33. Loewenstein G, Sah S, Cain DM. The unintended consequences of conflict of interest disclosure. *JAMA* 2012;307(7):669-70.
34. American Medical Student Association [press release]. *Majority of U.S. medical schools have strong pharmaceutical conflict-of-interest policies: AMSA survey to review policies at U.S. teaching hospitals next.* Sterling, VA: American Medical Student Association; 2013. Available from: **www.amsa.org/AMSA/Homepage/About/News/040913.aspx**. Accessed 2014 Jun 23.
35. Medical school revises COI policy. *Harvard Gazette* 2010 Jul 21. Available from: **http://news.harvard.edu/gazette/story/2010/07/medical-school-revises-coi-policy/**. Accessed 2014 Jun 23.
36. Lenzer J, Brownlee S. Naming names: is there an (unbiased) doctor in the house? *BMJ* 2008;337:a930.
37. PLoS Medicine Editors. Making sense of non-financial competing interests. *PLoS Med* 2008;5(9):e199.
38. Pisacane A. Rethinking continuing medical education. *BMJ* 2008;337:a973.
39. Tax industry to fund CME? Yes, in France. *Global CME Newsletter* October-November 2011. Available from: **www.wentzmiller.org/cmenewsletters2011.html.** Accessed 2014 Jun 23.