Does conflict of interest impact speaker credibility?

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Pharmaceutical sponsorship of medical education is a controversial issue.¹⁻⁴ With continuing technological advances and the surge of new pharmaceuticals on the market, medical training programs struggle to keep their residents up to date. One response to this challenge has been the incorporation of industry-sponsored conferences into the curriculum.

Several authors have proposed guidelines regulating the activities of pharmaceutical representatives.²⁻⁴ The American Medical Association (AMA) Council on Ethical and Judicial Affairs has issued guidelines for pharmaceutical sponsorship of continuing medical education (CME) activities.⁵ These guidelines require, among other things, that all potential conflicts of interest be disclosed to the audience. There are no studies demonstrating the impact of such disclosure on learner responses; however, an experience at our centre suggests that awareness of conflict of interest does affect an audience's acceptance of speaker recommendations.

Can you judge a book by its cover?

A speaker was invited to discuss the management of acute myocardial infarction (AMI) at our emergency medicine (EM) grand rounds. He identified himself as a member of the American College of Cardiology/American Heart Association (ACC/AHA) Task Force on Practice Guidelines, Committee on Management of Acute Myocardial Infarction, and several of his slides carried the logo of this group. His talk was sponsored by a pharmaceutical company but, inadvertently, no disclosure of this sponsorship was made. During the lecture, he made 3 statements that differed from ACC/AHA guidelines⁶ then in use. His statements [and our comments] follow.

- 1. Unless contraindicated, beta-blockers should be given immediately in the emergency department. [The ACC/AHA guidelines specified that beta-blockers be given within 12 hours, not specifically in the emergency department (ED).]
- 2. Esmolol is the preferred beta-blocker. [The ACC/AHA guidelines did not specify an agent.]
- 3. Second-generation antiplatelet agents are promising potential therapies for AMI. [The ACC/AHA guide-lines did not include this statement.]

One month after the EM grand rounds, we developed an anonymous questionnaire that posed 3 true/false questions corresponding to the 3 discrepant statements listed above. The questionnaire was distributed to attendees at a research seminar. Eighteen seminar attendees completed the questionnaire. Of the 18 respondents, 7 (all residents) had been in attendance at the EM grand rounds when the discrepant statements were made. Seventeen of the 18 respondents agreed that beta-blockers should be given immediately in the ED and all agreed that second-generation antiplatelet agents are promising potential therapies; however, an interesting dichotomy arose with respect to esmolol. Five of the 7 residents (71%) who had attended the EM grand rounds identified esmolol (incorrectly) as the beta blocker of choice in AMI, while only 1 of the 11 nonattendees (9%) did so.

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Five of the 7 residents who had attended the EM grand rounds were unaware that a pharmaceutical company had sponsored the speaker. After being told of the sponsorship, they repeated the questionnaire. Two of the 5 changed a total of 3 responses, from agreement with the speaker to disagreement.

Credibility gap?

Although it falls short of a randomized clinical trial, this "natural experiment" suggests 2 important findings:

- 1. Omitting information about a speaker's sponsorship and potential conflict of interest substantially impacted residents' beliefs about the speaker's credibility.
- 2. When compared to non-attendees, residents who attended a conference sponsored by a pharmaceutical company were more likely to respond erroneously to 1 of 3 questions about medications endorsed by the speaker.

A recent systematic review⁴ concluded that industry substantially influences physician prescribing behaviour through a number of means, including meetings with pharmaceutical representatives, gifts, medication samples, industry-paid meals, funding for travel or lodging to attend educational symposia, pharmaceutical speakers at luncheon conferences, research funding, honoraria and CME sponsorship. CME sponsorship may be particularly effective in changing residents' prescribing decisions.⁷

Despite its anecdotal nature, this experience provides evidence that sponsored speakers can influence physicians' beliefs, that failure to disclose conflict of interest impairs our ability to filter educational information, and it also supports the position that all potential conflicts of interest should be disclosed at medical conferences and educational events.

Key words: conflict of interest, ethics, bioethics, pharmaceutical industry

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