North Pacific Surgical Association

Perceptions of conflict of interest: surgeons, internists, and learners compared

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KEYWORDS:
Conflict of interest; Perceptions; Surgeons; Internists; Learners

Abstract

BACKGROUND: Making a conflict of interest declaration is now mandatory at continuing medical education CME accredited events. However, these declarations tend to be largely perfunctory. This study sought to better understand physician perceptions surrounding conflict of interest.

METHODS: The same PowerPoint (Microsoft, Canada) presentation (http://www.youtube.com/watch?v=mQSoVch7Yg0&feature=g-upl) was delivered at multiple University of Alberta and Royal College CME-accredited events to surgeons, internists, and learners. After each talk, the audience was invited to complete an anonymous, pretested, and standardized 5-point Likert scale (strongly disagree to strongly agree) questionnaire.

RESULTS: A total of 136 surveys were analyzed from 31 surgeons, 49 internists, and 56 learners. In response to the question regarding whether by simply making a declaration, the speaker had provided adequate proof of any conflicts of interest, 71% of surgeons thought so, whereas only 35% of internists and 39% of learners agreed or strongly agreed (P = .004). Further probing this theme, the audience was asked whether a speaker must declare fees or monies received from industry for consulting, speaking, and research support. Once again there was a variance of opinion, with only 43% of surgeons agreeing or strongly agreeing with this statement; yet, 80% of internists and 71% of learners felt that such a declaration was necessary (P = .013). Further probing this theme, the audience was asked whether a speaker must declare fees or monies received from industry for consulting, speaking, and research support. Once again there was a variance of opinion, with only 43% of surgeons agreeing or strongly agreeing with this statement; yet, 80% of internists and 71% of learners felt that such a declaration was necessary (P = .013). Further probing this theme, the audience was asked whether a speaker must declare fees or monies received from industry for consulting, speaking, and research support. Once again there was a variance of opinion, with only 43% of surgeons agreeing or strongly agreeing with this statement; yet, 80% of internists and 71% of learners felt that such a declaration was necessary (P = .013). Further probing this theme, the audience was asked whether a speaker must declare fees or monies received from industry for consulting, speaking, and research support. Once again there was a variance of opinion, with only 43% of surgeons agreeing or strongly agreeing with this statement; yet, 80% of internists and 71% of learners felt that such a declaration was necessary (P = .013). Further probing this theme, the audience was asked whether a speaker must declare fees or monies received from industry for consulting, speaking, and research support. Once again there was a variance of opinion, with only 43% of surgeons agreeing or strongly agreeing with this statement; yet, 80% of internists and 71% of learners felt that such a declaration was necessary (P = .013).

CONCLUSIONS: Even when they are completely open and honest, conflict of interest declarations do not negate the biases inherent in a speaker’s talk or research when it is industry sponsored. The larger issue is how best to manage these conflicts.

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It appeared that almost twice as many surgeons as internists or learners were happy with a simple declaration of conflict of interest. Internists believed that declaring monies received was a necessary component of a conflict of interest declaration and did so at nearly twice the rate of surgeons. The majority of learners held similar views. Across the groups, only one half thought that a speaker was more believable if a declaration was made. Two thirds of surgeons and learners, and nearly all internists surveyed, agreed that industry-sponsored research was biased.

None of the authors have received industry or organizational support for this or previous work.

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Manuscript received October 22, 2012; revised manuscript January 9, 2013

0002-9610/$ - see front matter © 2013 Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.amjsurg.2013.01.012
Conflict of interest was probably best defined by Dennis Thompson in the *New England Journal of Medicine* in 1993 as “A set of conditions in which professional judgment concerning a patient’s welfare or validity of research can be influenced by financial gain: paid speaking engagements, gifts, travel, owning of company shares etc.” It is important to recognize that conflict of interest does not equal bias, but conflicts may promote bias.

The partnership between industry and academic institutions, physicians, and biomedical researchers reaps enormous health care benefits, particularly with ever-diminishing government funding. However, the risks of such entanglements are also considerable. Industry-sponsored research tends to draw proindustry conclusions, result in multiple reporting of positive study outcomes and publication bias, manipulate prescribing practice (eg, gabapentin), and promote the use of surgical equipment that may not be effective or worse may be unsafe. Paid consultancy, speaking engagements, and entertainment are all techniques that help industry ensure their fiduciary responsibility to their shareholders.

In 2013, US Senator Grassley’s Physician Payments Sunshine Act of 2009 will come into law, and payments to physicians and institutions of more than $10 must be reported and the information must be retrievable on searchable databases. How this will alter the relationship and its influence on practicing physicians and researchers remains to be seen.

The purpose of this study was to better understand whether declarations of conflict of interest alter the perceptions about the declarer and the information they are providing.

### Methods

A single-page survey tool (Fig. 1) was developed, pre-tested on 10 physicians, and subsequently refined. The questionnaire contained 4 questions and used a standard Likert scale. The anchors ranged from strongly agree to strongly disagree with the statements in the questionnaire. The questionnaire was administered immediately after a 17.47-minute rounds presentation (http://www.youtube.com/watch?v=mQSOvch7Yg0&feature=g-upl) during the question period. The presentation was delivered by the same speaker (C.D.) at several (n = 4) Royal College of Physicians and Surgeons of Canada continuing medical education (CME)-accredited events held at various sites at the University of Alberta, Edmonton, Alberta, Canada. The questionnaire was anonymous, but respondents were asked to identify whether they were a surgeon, an internist, or a learner.

The analysis of the data and the chi-square test $P$ values for equal proportions in the response rates to the questions were carried out using the SAS statistical package SAS, version 9.2 (SAS Institute, Cary, NC), and the charts were generated using Microsoft Excel (Microsoft, Redmond, WA).

### Results

The data from a total of 136 questionnaire respondents were analyzed. Complete data were available from 31 surgeons, 49 internists, and 56 learners.

![Survey questionnaire](http://www.youtube.com/watch?v=mQSOvch7Yg0&feature=g-upl)
The first question sought to understand the perceptions of the 3 groups about the value of conflict of interest declarations (Fig. 2). Was the process of a speaker simply declaring that he or she had received payments from industry for speaking, consulting, or research an adequate declaration? There was considerable variance in opinion about this question, with 45% of respondents agreeing with the statement and 35% disagreeing, and a further 20% being neutral. These differences were significant \((P = .003)\). When the 3 groups were compared, internists (35%) and learners (39%) agreed that making a declaration was adequate, but this was considerably less than percentage of surgeons, 71% of whom felt that a simple declaration was adequate. This too was a significant finding \((P = .004)\).

Exploring this theme further, the next question sought the opinion of the audience about whether the actual amount of monies received for consulting, speaking, and research was a necessary component of the conflict of interest declaration process. A full 68% of respondents felt that declaration of the amount of money is necessary, with only 15% disagreeing and 17% being neutral \((P < .01)\). Once again, the 3 groups varied in their responses, with internists (80%) and learners (71%) agreeing that such types of declaration were necessary, yet only 43% of surgeons felt similarly \((P = .013)\).

One of the unintended consequences of conflict of interest declarations \(^8\) is that by making a declaration the presenter enhances his or her credibility and makes the message that they are delivering more believable. To the question concerning this, nearly half of the respondents (47%) agreed that this was the case. However, 25% disagreed and 28% were neutral \((P = .03)\). When the 3 groups were compared, there was a much closer alignment, with surgeons (50%), internists (41%), and learners (52%) \((P = .2)\) agreeing with this statement.

With fully two thirds of biomedial research being sponsored by industry and the reality that published results tend to favor the sponsoring industry, \(^9\) the fourth question sought to test the audience’s view as to whether such industry support produces biased research. Resoundingly, almost three quarters of the respondents (73%) agreed that industry-sponsored research does bias results, with only 9% disagreeing with the statement and 18% being neutral \((P < .0001)\). Interestingly, it was internists who felt most strongly that this was the case (84%), whereas surgeons (68%) and learners (66%) were more closely aligned \((P = .2)\).

Comments
Conflict of interest has been a topic in the medical literature for more than 25 years. \(^10\) Biomedical research in the United States is a $100 billion enterprise, with approximately 65% supported by industry. \(^11\) The financial ties that intertwine industry, investigators, and academic institutions can influence the research process in both positive and negative ways. \(^3\) It was these potential conflicts of interest that lead Senator Grassley to introduce a bill into Congress entitled “The Physician Payments Sunshine Act of 2009.” \(^16\) In essence, after 2013 all payments to individual physicians and medical institutions of greater than $10 shall be searchable on an electronic database. Whether this legislation will prevent actions such as those involving Dr Charles Nemeroff, the former chair of the Department of Psychiatry at Emory University, is uncertain. Dr Nemeroff was an internationally famous author and researcher who received payments from industry of more than $2.5 million while at the same time possibly suppressing the suicide risk associated with the antidepressant Paxil. \(^12\) Bhandari et al. \(^9\) found a significant association between industry funding and statistically significant proindustry findings in medical and surgical randomized studies. Most medical journals have strict conflict of interest policies and guidelines and reinforce the recommendations from the Institute of Medicine. \(^13\) However, such conflict of interest disclosures may have unintended consequences—eg, by making a disclosure, the speaker is more credible. \(^5\) Even the value of clinical practice guidelines can be called into question. Neuman et al.’s \(^14\) recent article in the British Medical Journal found that a significant proportion of clinical practice guidelines panelists have major financial ties to industry and are therefore in a potential conflict of interest situation. These and other issues pertaining to conflict of interest were a topic of a symposium hosted by the American Society of Law, Medicine, and Ethics. \(^15\)

A number of studies have been carried out in an attempt to better understand conflict of interest perceptions. Watson et al. \(^16\) surveyed residents and faculty about their perceptions regarding financial relations with industry. Chimonas et al. \(^17\) also examined the dynamics of the relations between physicians and drug representatives and concluded that voluntary guidelines like those proposed at most medical societies are inadequate. A randomized study of fellows of the American College of Obstetrics and Gynecologists survey concluded that the effectiveness of merely disclosing funding sources of published studies was questionable. \(^18\)

We believe our study adds to the literature and is unique because it provides those surveyed with context and content regarding conflict of interest. Before surgeons, internists, and learners were anonymously surveyed, they all participated in Royal Colleges of Physicians and Surgeons of Canada CME-accredited rounds held at the University of Alberta (http://www.youtube.com/watch?v=mQSOvch7Yg0&feature=g-upl). Evidence-based content of these rounds are freely available for viewing on YouTube. In theory, the presenter’s bias on the topic of conflict of interest could influence the survey responses. Given the variation in responses between the 3 groups to certain questions, this would appear to be less of an issue. Although the study does identify important perceptual differences between surgeons, internist, and learners, the finding that declaration of monies is sufficient for some but not for others is noteworthy. In most presentations and in the
literature declarations are made and are sufficient; the fact that barely 45% agreed with the statement and fully one third frankly disagreed is an important finding. The fact that more than two thirds of respondents to this survey felt that presenters of medical information and research need to declare the amount of monies they receive from industry is worth noting and should be taken into account by institutions, medical societies, and journal policy makers. The halo effect, which may occur when a declaration of conflict given by a presenter in making their message more believable, acknowledges the human failing of this cognitive bias. On the other hand, fully three quarters of respondents recognized that industry-funded research promotes biased results. Given that virtually no clinical trials would be conducted if not for industry funding makes this observation important.

When the 3 groups were compared, it was interesting to see that the surgeons were far more likely (71%) to feel that a conflict of interest declaration was sufficient, whereas only one third of internists and 40% of learners felt similarly (Table 1). Conversely, more than three quarters of internists and three quarters of learners felt that a speaker needs to declare the amount of monies he or she has received in industry support, whereas only 40% of surgeons

<table>
<thead>
<tr>
<th>Question</th>
<th>Surgeons (%)</th>
<th>Internists (%)</th>
<th>Learners (%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a declaration is adequate</td>
<td>45</td>
<td>20</td>
<td>35</td>
<td>.004</td>
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<tr>
<td>Declaring monies received is necessary</td>
<td>68</td>
<td>80</td>
<td>71</td>
<td>.013</td>
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<tr>
<td>Declaration makes speaker more believable</td>
<td>50</td>
<td>41</td>
<td>52</td>
<td>.2</td>
</tr>
<tr>
<td>Industry-sponsored research is biased</td>
<td>68</td>
<td>84</td>
<td>66</td>
<td>.2</td>
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felt similarly. Interestingly, nearly two thirds of learners felt that a declaration made a speaker’s message more believable, whereas only half of the surgeons and less than 40% of internists felt similarly. On the topic of funding support by industry biasing research results, although two thirds of surgeons and learners agreed, more than 80% of internists recognized this type of bias.

It is interesting to speculate about the differences observed between the 3 groups surveyed. More specifically, why is it that internists and learners views tend to align but surgeons seem more satisfied that a simple declaration of any conflict is sufficient and that it is not necessary to indicate the amount of monies that the presenter may have received from the sponsoring agency. One possibility is the type of relationship that surgeons develop with industry partners, particularly concerning instrument and equipment manufacturers. These relationships are often quite close, with industry representatives attending operating rooms and surgeons lounges and sponsoring teaching events. Company representatives become “friends”: and are part of the same “team,” sharing in the successes and failures of the product. Conversely, the relationship that internists and learners may have with the drug industry in sponsoring educational events and clinical and basic research may feel less direct. Benefits of the relationship are in a consultative capacity and may appear to have less overt or covert influence on behavior because the monies obtained appears unrestricted and freer from potential bias. To more completely understand these perceptual differences, additional study would likely require qualitative research methodology based on grounded theory. This is usually performed through a series of multiple interviews; the goal is to formulate a hypothesis based on conceptual ideas.

Conclusions

In summary, conflict of interest continues to be a significant issue despite legislation and extensive institutional, medical society, and journal policies. Conflict of interest remains widespread. The pharmaceutical and instrument manufacturing industries continue to place biomedical researchers, practicing physicians, and the institutions in which they work in at significant risk of potential conflicts. These conflicts tend to produce bias in research result reporting and medical management, which must ultimately lead to diminution in the quality of health care and patient outcomes. Managing conflicts of interest continues to be a major challenge.

References


Discussion

Clifford W. Deveney, M.D, Portland, Oregon.

The authors have examined the attitudes of surgeons, internists, and students regarding conflict of interest statements, which are required by most journals and for speakers at CME-accredited events. The question is whether a simple conflict of interest statement is sufficient. Seventy percent of surgeons thought the conflict of interest statement to be adequate, whereas 35% of internists and 39% of students concurred that the simple statement was adequate. When asked if a presenter should be required to declare monies received for speaking, consulting, or research, 80% of the internists, 71% of learners, and only 43% of surgeons thought this was necessary.

I cannot explain why internists were more sensitive to the issue of conflict except for the fact that there have been several lawsuits in which drug companies were severely fined for manipulating data that minimized the adverse side effects
or exaggerated the efficacy of their drug. There have been fewer suits filed against instrument or prosthesis makers.

The goals of industry differ from those of a physician in one significant aspect. The companies want to sell their product, whereas the physician wants to provide the best care for the patient. When a company pays a physician to perform services as a speaker, consultant, or researcher, that payment produces a conflict that may or may not affect the physician’s judgment and produce a bias in the physician’s interpretation of results or endorsement of a product. How strong is the conflict? It is probably related to how much the physician receives from a company, so it is useful to know the amount a physician receives from a company if that person is presenting a talk or paper that deals with a product.

The potential for bias is recognized by most journals, many of which will ask authors for the amount of compensation and whether the researchers wrote the manuscript or if the company used their own employees to analyze the data and write the manuscript (ghost writers). Journals will also insist that the statistician reviewing the data be free of conflict.

As listeners or readers, you should be made aware of the conflict and consider the possibility of bias in the presented results. However, in the end it is up to you to decide whether or not the data is biased.

References