

DRUG PROMOTION

statement that “drug company sponsored research is indispensable,” many more were unsure whether this was true. The same effect was found regarding their views about whether material presented at drug company-sponsored seminars is “unbiased,” whether “such drug company-sponsored research is as likely to reach negative conclusions about the company’s drugs as is research from an alternative sponsor,” whether “when drug companies give physicians pens, calendars, or other non-educational materials, this biases the subsequent behaviour of those physicians,” and whether product information presented in drug advertisements serves an educational purpose.

The majority of students did not feel that it was unethical for physicians to interact with pharmaceutical company representatives, and this attitude was not dramatically affected by the intervention. However, more students were “uncertain” about every one of the issues addressed on the questionnaire after the intervention (see Tables 1 and 2). Very few students perceived an ethical conflict between providing the best possible care to patients and accepting small trinkets from a pharmaceutical company, and only a third found a problem with accepting free meals at a restaurant.

Attitudes towards future behaviours

After the educational exercise, even fewer students (25%, compared with 35% initially) felt they were sufficiently “skilled” to be able to critically assess claims made by pharmaceutical advertisements and promotions.

Similarly, after the educational intervention, the number of students who stated they would want to have drug company representatives available to them during their residency decreased from 86% to 61%. This was not because more students felt clearly opposed to such an arrangement (only 8% at both of the assessments), but because of a concomitant increase in the number of students who felt uncertain

about the desirability of such an arrangement (6% to 31%). The same pattern was evident with regard to their expectations about meeting with detailers after completion of residency training.

About one-third of our students felt that voluntary guidelines would be an effective method of assuring that drug company promotional and educational activities are accurate and fairly balanced. More than three-quarters felt that the FDA should aggressively punish drug companies that violate established rules regarding balance and accuracy.

Physicians prescribe pharmaceuticals throughout their professional lives, but because new drugs are being approved and marketed so quickly, it is likely that most current medical students will ultimately prescribe a great many medicines about which they had received no training in medical school or residency. The pharmaceutical industry spends enormous amounts of money promoting its products to physicians, and pharmaceutical promotions are indeed one of the primary sources of information many physicians rely upon in making drug choices, as well as in “learning about” unfamiliar medications.

There is evidence, however, that promotional material may not always be balanced, accurate or fair, such that uncritical acceptance of claims made by a proprietary interest can lead to widespread prescribing patterns that are hard to justify on the basis of the medical literature^{7,8}. Habits learned in medical school may affect behaviours throughout physicians’ careers, so we designed this exercise to try to encourage students to think critically when presented with promotional material from pharmaceutical companies.

We chose the exercise, rather than merely presenting information from the literature reflecting concerns about pharmaceutical promotions, because we felt the latter approach would probably be met with scepticism. Many physicians respond with disbelief, or even hostility, when it is suggested that their judgements can be influenced or distorted by “gifts”

Table 1
Third-year Medical Students’ Pre- and Post-intervention Responses to Statements Concerning Pharmaceutical Companies’ Interactions with Physicians

Statement	Pre-test		Post-test	
	% Agree (Mean)	% Uncertain	% Uncertain	% Agree (Mean)
When drug companies sponsor physicians to go to seminars at resort locations this biases the subsequent behaviour of those physicians (e.g., they prescribe more of the company’s product).	18 (3.49)	18	33	46* (2.77)
When drug companies give physicians textbooks or other educational materials, this influences their subsequent behaviour.	18 (3.44)	16	31	32 (3.92)
When drug companies give physicians pens, calendars, or other non-educational materials, this biases the subsequent behaviour of those physicians.	13 (3.53)	12	29	20* (3.82)
Drug company promotions are less likely to be about unique drugs than about drugs that are essentially similar to drugs made by other companies.	31 (2.90)	43	49	41 (2.74)
Drug company gifts to physicians do not significantly increase health care costs to patients.	26 (3.11)	36	48	13 (3.28)
Product information presented in a drug advertisement provides you with educational material about the drug.	49 (2.75)	28	41	43† (2.73)
Once they have finished their formal training, physicians have no alternative but to rely on drug company detailing to learn about new drugs.	6 (3.8)	9	19	8 (3.65)

* $p < .05$; † $p < .01$

Table 2
Third-year Medical Students’ Pre- and Post-intervention Responses to Statements Concerning Beliefs about the Ethics of Pharmaceutical-Medical Community Interactions

Statement	Pre-test		Post-test	
	% Agree (Mean)	% Uncertain	% Uncertain	% Agree (Mean)
It is unethical for academic researchers to be funded by drug companies to do research.	12 (3.41)	35	31	12 (3.45)
It is unethical for academic experts to take money from drug companies for giving lectures on topics of their own choosing.	11 (3.56)	43	57	12 (3.43)
It is unethical for academic experts to take money from drug companies for giving lectures at company-sponsored seminars.	12 (3.53)	23	37	13 (3.37)
It is unethical for physicians to accept drug company funding to attend seminars at resort locations.	26 (3.30)	18	32	33* (3.02)
It is unethical for physicians to accept free textbooks or other educational materials from drug companies.	18 (3.40)	13	22	27 (3.88)
It is unethical for physicians to accept free pens, calendars, or other non-educational materials from drug companies.	3 (3.83)	11	26	4 (3.67)
It is less ethical for fully trained physicians in practice to accept gifts from drug companies than it is for house officers or students (who are typically making far smaller salaries and who are not charging for their services).	8 (3.84)	15	17	14 (3.42)

* $p < .05$

and favours from industry. It is our experience that many students, likewise, feel patronised, or offended, when “lectured to” about ethical issues such as those raised by physicians’ interactions with pharmaceutical representatives (particularly when these interactions come with financial inducements attached). Although we did feel some discomfort about having hospital pharmacists pretend to be actual company representatives, we ultimately felt that this was not a major concern because students would learn the true nature of the exercise before leaving the session. Furthermore, we felt the stimulation associated with this “live” presentation would give us the opportunity to make an impression upon students and facilitate serious discussion of complex issues.

We made every effort to assure that the exercise itself was fair by asking the UCLA Department of Pharmacy to design a presentation that honestly reflected standard industry presentations. The pharmacists who participated had all had extensive experience with drug representatives and company promotions, and all had studied this issue extensively during their own training at UCLA.

The pre- and post-intervention results, while far from definitive, do suggest that the students’ attitudes were affected by this exercise. The primary impact seems to be that the students became more uncertain about the issues raised, rather than that they adopted frankly negative beliefs or feelings. Regardless of whether the questions dealt with the accuracy of companies’ promotions and presentations, the quality of sponsored research, the nature of the interaction between physicians and company representatives, or students’ individual behaviours in the future, a majority of the students apparently had no concern or ethical doubt prior to the exercise, whereas a greater number of such students expressed uncertainty about the same matters three months later.

We have no idea to what extent these probable changes in attitude are durable, or whether (even in the short term) they would actually be associated with changes in behaviours. We do not believe

our duty as educators, though, is to influence our students to adopt particular positions at the expense of others. Rather, our duty is to raise questions and concerns in the minds of students, and teach them to think critically. We believe that this exercise, which raises issues medical students will have to confront throughout their careers, was successful in stimulating that process. □

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