

DRUG PROMOTION

An innovative approach to educating medical students about pharmaceutical promotion

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PRESCRIPTION drugs comprise approximately 9% of the total cost of health care in the United States, but physicians who are responsible for such prescribing are frequently unaware of both the costs and the consequences¹, and in many cases the prescriptions that are written lack adequate medical indications. Over 85% of today's prescription drugs have been introduced into clinical practice in the past 30 years. A 55-year-old physician who graduated in the mid-1960s learned about only a small minority of the medicines in current use during his or her formal training. In the year 2000 alone, the US Food and Drug Administration (FDA) approved 98 new drug products. How doctors obtain the information about new and changing pharmaceuticals that will inform their choices when prescribing obviously has the potential to have a profound impact on health care costs and pharmaceutical companies' profits.

There are a variety of ways for physicians to attempt to stay current with new medicines, including reading publications in peer-reviewed and non-peer-reviewed journals and newsletters, and participating in continuing education courses. Some of these courses are funded by part of the enormous amount of money that the pharmaceutical industry spends on promotions to physicians². The industry also supports "detailing" activities, publications and research projects, and the distinction between promotion and education is frequently unclear³⁻⁷. Proprietary advertising frequently fails to conform to the FDA's guidelines regarding fairness and accuracy⁷⁻⁸. There is, however, substantial evidence that promotional money is well spent, from the point of view of the companies, because it greatly influences physicians' behaviours⁹. Even young physicians in residency training programmes appear to accept a great deal of such material uncritically¹⁰.

As directors of a medical school curriculum designed to focus on aspects of (among other things) health care economics, medical ethics, clinical pharmacology and evidence-based medicine, we have been interested in fostering critical thinking among students. We are also keenly interested in teaching students how to access and evaluate information in the medical literature as it becomes available. We are aware that students and house officers interact regularly with pharmaceutical representatives, so we created an educational programme for students that we hoped would educate them about some elements of drug marketing, and help them to evaluate the choices they will have in dealing with proprietary interests in the future. In conjunction with this programme we devised a pre- and post-programme questionnaire to evaluate its impact on students' attitudes about the accuracy and ethics of standard drug detailing.

Pharmaceutical promotion exercise

The educational exercise was designed to address the impact of pharmaceutical manufacturers on

physicians' behaviour. The faculty development session stressed the overall objectives of the exercise:

1. To understand the reasons for detailing pharmaceuticals to the medical profession;
2. To understand potential advantages and disadvantages of pharmaceutical-medical professional interactions;
3. To understand the impact of pharmaceutical promotion on health care costs;
4. To discuss possible reasons in support of and against accepting gifts intended to influence prescribing behaviours;
5. To understand the accuracy and honesty of information that is conveyed to physicians by pharmaceutical company detailers.

The exercise consisted of a presentation by University of California (UCLA) full-time pharmacists playing the role of a pharmaceutical representative before small groups. Each pharmacist gave the eight students and two faculty members in each group a 20-minute talk on the virtues of a non-sedating antihistamine. The students were unaware that these "drug reps" were actually UCLA pharmacists.

The students were told at the outset of the session that because they would be exposed to pharmaceutical representatives on a regular basis throughout their careers, one such encounter should be presented. They were told that the drug reps would have an opportunity to make a brief presentation to the group on behalf of a very popular and aggressively marketed medication, and would then be willing to answer questions. The drug reps brought handouts, supportive educational and promotional materials (including items such as pens and writing tablets), and a snack of bagels and cream cheese (actually provided by UCLA) to the meeting.

The five pharmacists who portrayed the drug reps were UCLA Pharmacy and Therapeutics Committee members, drug information specialists, and ambulatory and inpatient clinical pharmacists, including one individual who had previously worked as a pharmaceutical representative. The pharmacists had all previously

attended two training sessions run by the course directors and pharmacy director in which institutional policies and procedures and FDA guidelines regarding pharmaceutical representatives were reviewed. The participating pharmacists had extensive personal experience of meeting with pharmaceutical representatives. The pharmacists selected the medication to be detailed in the intervention (a non-sedating antihistamine) because it was one that was actively being promoted. Further, the pharmacists had seen the current marketing approaches that had been used by the pharmaceutical representatives promoting the drug. Their experiences were collated and reviewed for conformity with overall industry tactics and standards, and a presentation script was developed. The pharmacists used actual materials that had previously been given to the university's pharmacy by the manufacturer of the drug being "detailed." The pharmacists practised the presentations individually and together to assure that the standardised goals were accomplished and that the presentations, while deliberately designed to accent the benefits associated with the drug being promoted, sounded believable, and did not contain any outright untruths. In addition, the presentations were scripted so that each contained the following elements:

1. Anecdotal references to use by physicians at other university hospitals;
2. Somewhat exaggerated (favourable) claims about toxicity and side-effects;
3. Claims of effectiveness citing information based on doses different from those used in common practice;
4. No mention of adverse effects;
5. Assertions about relative efficacy without supporting documentation;
6. No information about costs;
7. Reference to "their" product by its trade name, but to all products of potential competitors by generic name only.

After the presentation, the students were encouraged to ask questions. If the following questions were not asked by students, faculty were instructed to ask how much the drug cost relative to competitors, what the side-effects of the drug were compared with other drugs, and whether there had been any trials comparing the drug head-to-head with competitively marketed agents (other second-generation antihistamines). Once all questions were answered (in a standardised, reproducible manner, as well as could be anticipated) the drug reps were thanked and left the room. Students were then led through an exercise intended to critique the presentation, and specifically to address whether:

- the presentation had been balanced;
- the presentation had been accurate;
- the presenter had adequately backed up his or her claims;
- the presenter had discussed economic

implications of use of the drug;

- the presenter had fairly compared the promoted drug with alternatives;
- this had been a useful educational experience; and
- the student would be more or less likely to use the drug in question after hearing the presentation.

Following this 20-minute discussion the "drug rep" was invited back into the classroom and reintroduced to the students as a university pharmacist and drug information consultant. The hospital pharmacists were asked to explain how their presentations reflected actual marketing strategies, as well as to point out any distortions or omissions they had made during their initial presentation.

The pharmacists talked with the students about the training and background of pharmaceutical detailers, and the process of common marketing approaches, including the use of claims and comparisons, gifts, and sponsored talks. In addition, the students explored how and why manufacturers manipulate information to benefit sales of their products. The group discussed what impact promotional activity has on health care, the impact of detailing on the costs of drugs to consumers, and possible reasons and rationales physicians give for accepting or refusing to accept gifts from manufacturers. As the last part of the exercise, the students were shown how to access unbiased, evidence-based drug information using the university hospitals' computer system. This completed the educational intervention.

Pre- post-intervention survey

Before the small-group sessions began, the students completed a self-administered, anonymous questionnaire that had been pilot tested, containing 26 items dealing with the interface between the pharmaceutical manufacturers and the medical profession. We also administered a post-intervention survey 12 weeks after the educational session.

Attitudes toward interactions with pharmaceutical manufacturers

Students' attitudes toward drug company sponsorship of research, drug company-physician interactions (detailing), and drug advertisements as educational tools changed after their participation in the educational programme (see Table 1). In each case, these changes were mostly reflected by increases in the numbers of students who had initially been confident that the issue in question was not problematic, but who then had become uncertain about this. For example, responses to the post-intervention questionnaire showed that, while a few more students disagreed with the