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Pharmaceutical representative rounds: teaching resident physician–pharmaceutical representative interactions

Gretta A. Gross, DO,[a] Jonathan D. Ference, PharmD, BCPS[a,b]

From the [a]Wyoming Valley Osteopathic Family Medicine Residency Program, Kingston, PA; and [b]Wilkes University Nesbitt College of Pharmacy & Nursing, Wilkes-Barre, PA.

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PURPOSE: Physicians interact with pharmaceutical representatives on a frequent basis and such interactions may influence one's prescribing habits. Providing educational and training opportunities for physicians to interact with pharmaceutical representatives in a meaningful manner speaks directly to the American Osteopathic Association Code of Ethics section relating to interaction of physicians with pharmaceutical companies. Currently no uniform curricula exist for such opportunities within graduate medical education.

METHODS: We developed Pharmaceutical Representative Rounds as an educational activity to teach family medicine residents how to identify and interpret marketing techniques and information from pharmaceutical representatives in an ethical and meaningful way. On a monthly basis, a pharmaceutical representative is invited to provide detailed information to the program's residents and faculty. The detailing material is evaluated using standardized criteria developed to identify and differentiate between the types of promotional techniques and medication-related information. On the basis of this evaluation, a faculty-led discussion occurs where the group attempts to come to an understanding of the product and where it fits in current practice.

CONCLUSIONS: A standardized method of providing training on physicians' interactions with pharmaceutical representatives increases the likelihood that physicians will use information about a medication in a manner in line with the AOA Code of Ethics and ultimately enhance the care of their patients.

In the Unites States, there are 90,000 pharmaceutical representatives, or 1 for every 6.3 physicians.[1] Given these numbers, chances are that physicians in training will encounter a pharmaceutical representative either in medical school or during their residency, regardless of academia's attempts to avoid them. Interactions with representatives begin in medical school and continue at a rate of about four times per month throughout a physician's career.[2] In 2002, the American Medical Student Association (AMSA) established its PharmaFree Campaign, which advocates for evidence-based rather than marketing-based prescribing practices, global access to essential medicines, and the removal of conflict of interest in medicine.[3] In 2007, the AMSA released their first "PharmFree Scorecard," which grades medical schools on the presence or absence of a policy regulating the interactions between their students and faculty and the pharmaceutical and device industries. Even in the unlikely event that a future physician does not directly encounter a pharmaceutical representative, they only have to turn on the television or open a magazine or a medical journal and they are bombarded by advertisements for the next blockbuster medication (Fig. 1). The pharmaceutical

Corresponding author: Gretta A. Gross, DO, Director of Osteopathic Medical Education, Wyoming Valley Osteopathic Family Medicine Residency Program, 2 Sharpe St., Kingston, PA 18704.
E-mail address: ggross@wvhcs.org.

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Professional Exposure	
	Office discussions with pharmaceutical representatives
	Samples provided to the office
	Influence on prescription plan formularies
	Medication promotional meals with expert presentations
	Pharmaceutical sponsorship of research and related articles
	Lecture presentation opportunities for physicians
	Pharmaceutical advertisements in trade journals
	Pharmaceutical sponsorship of CME opportunities
Consumer Exposure	
	Advertisements in print, television, and via the internet
	News articles online and in print
	Patient assistance programs
	Social media exposure: Facebook, Twitter, etc

Figure 1 Spectrum of pharmaceutical marketing influences.

industry is one of the most profitable industries in the United States, owing in large part to their ability to successfully market medications.

Although physicians may believe their prescribing habits are not influenced by marketing, the evidence suggests otherwise.[2] Regardless of where a physician stands on interactions with the pharmaceutical industry, advertising has a profound effect on the prescribing habits of both practicing physicians and residents.[2] A review of physicians in training demonstrated that only a minority of trainees felt that their own prescribing habits could be influenced by pharmaceutical representatives, but were more likely to believe that other's prescribing could be influenced.[4] It should not be assumed that all interactions with pharmaceutical representatives have a negative effect; physicians who interacted with them demonstrated an improved ability to identify the treatment for complicated illnesses. Pharmaceutical representatives are experts on the medications they detail and can provide physicians with information on dosages, indications, contraindications, pharmacokinetics, and side effects. However, many believe the negatives influences exceed the benefits. Physicians were less likely to identify wrong claims about medications, more likely to prescribe a new brand-name medication as opposed to a generic, and made more formulary requests for medications that rarely held a clinical advantage over existing ones.[2] When interacting with the pharmaceutical representative, it is incumbent upon the physician to remember the reason why they call on you in the first place: to sell their product. They are trained to use effective sales techniques to create an increase in the number of prescriptions for their product.[5] Given the ubiquity of pharmaceutical representatives and the potential to influence prescribing, it seems logical that we should train future physicians to interact with them in a professional and ethical manner, much like we train physicians to function within the interprofessional health care team. Unfortunately, at this time no standardized curricula exist.

A 2008 systematic review of available curricula that provide training on the relationships between residents and the pharmaceutical industry identified nine published programs addressing resident–pharmaceutical industry interactions.[6] Because of heterogeneity in program content, application, and evaluation, the authors were unable to make definitive conclusions about the effectiveness of these interventions. However, the observed trend toward resident attitudes and behaviors being affected by the pharmaceutical representative–physician interaction appears to confirm earlier data.[2] The authors feel this review affirms the need for a widespread, standardized approach to teaching residents appropriate interactions.

The American Osteopathic Association (AOA) Code of Ethics may be used to inform such efforts.[7] In part, the section relating to interaction of physicians with pharmaceutical companies states that it is the "Physicians' responsibility is to provide appropriate care to patients. This includes determining the best pharmaceuticals to treat their condition. This requires that physicians educate themselves as to the available alternatives and their appropriateness so they can determine the most appropriate treatment for an individual patient. Appropriate sources of information may include journal articles, continuing medical education programs, and interactions with pharmaceutical representatives."[7] Our goal is to arm our residents with the necessary tools to provide the best care for their patients. This method is one such tool for that armamentarium.

Many avenues exist for potential resident–pharmaceutical representative curricula, from reviewing videotaped interactions and faculty debates to small group discussions.[8-10] We would like to share the approach we use to educate our residents. The goal of our educational program is to improve resident ability to interpret the information provided from a pharmaceutical representative. This approach directly speaks to the AOA's ethics statement that the physician be educated as to how to interpret the information.[7] The following describes our current approach.

Program

Each month we schedule a pharmaceutical representative to present during our morning academic time (Fig. 2). The representative is asked to speak for approximately 10 minutes regarding their product or products, and the audience consists of our family medicine residents, medical and pharmacy students on rotation, and our academic faculty in family medicine and pharmacy. During the scheduling process, the faculty moderator requests the pharmaceutical representative give a typical product detail and provides them with an overview of the educational purpose of the program. On the day of the presentation, the pharmaceutical representative is introduced, welcomed, and given the floor for the detail presentation. Upon completion, they are asked to leave the room and the audience reviews the information presented.

Before starting the detail, attendees are given the Pharmaceutical Representative Feedback Form (Fig. 3).[11] This form covers various sales tactics used by pharmaceutical representatives during a typical detail. Participants are asked to complete the form during the presentation to help identify behaviors and tactics that the representative may

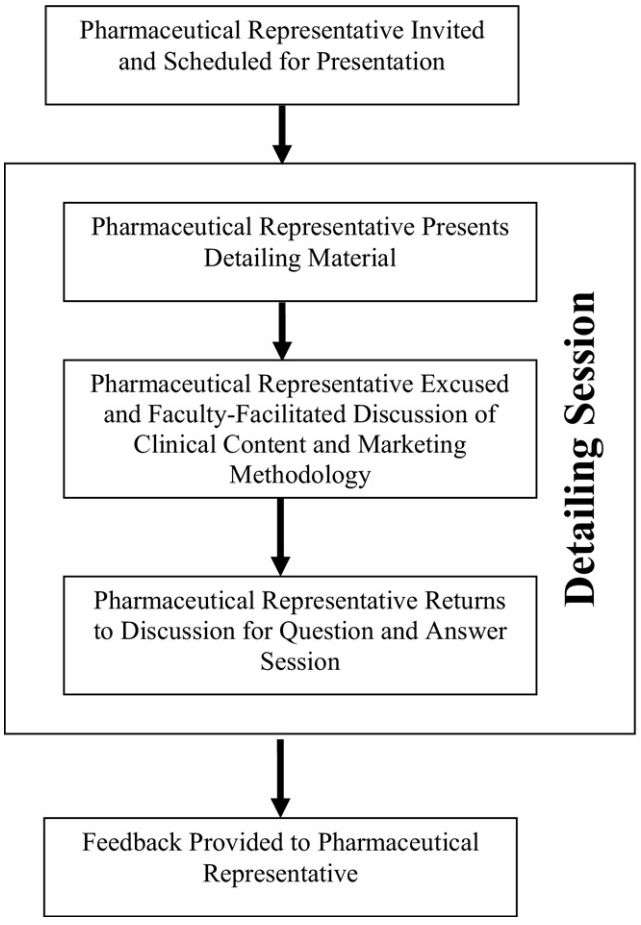

Figure 2 Flow of pharmaceutical representative rounds.

have used to market the product. This form then serves as the starting point for the faculty-led discussion that occurs once the representative has left the room.

This discussion focuses on two areas: the marketing and promotional techniques used during the presentation and evaluating the pharmacologic information presented. Increasing practitioner ability to identify marketing and promotional techniques and the reasons they are used is an essential skill for physicians to possess when interpreting sales information.[5,8] Evaluating the pharmacologic information presented and reviewing the role of the medication in current practice allows for the participants to educate themselves on how to interpret the information before them.[11] Both of these areas are evaluated on the form.

Promotional techniques that are often used by representatives include humor or personal stories to "break the ice"; repetition of product name or advantages; use of headlines, gifts, or tokens (including food); positive feedback; solicitation of faculty support; promotion of active learning by asking questions; diminishing medication disadvantages or competitive medications; asking practitioners to give the medication a try; and incentives. By pointing out where and how these techniques were incorporated into the presentation, the participants are better able to identify them for

PHARMACEUTICAL REPRESENTATIVE FEEDBACK FORM
STEPS Format

1. General
a. Date: _____ Resident _____
b. Name of Representative: _____
c. Company Represented: _____
d. Drug(s) Emphasized Today: 1._____ 2._____
e. Main goal of presentation today: Reminder New Information Persuasion

2. Information Presented

a. The following information was presented:	Drug #1 Yes	Drug #1 No	Drug #2 Yes	Drug #2 No
Generic name of the drug	___	___	___	___
Comparative clinical information with other drugs	___	___	___	___
Adverse effects	___	___	___	___
Contraindications	___	___	___	___
Patient cost	___	___	___	___

b. The information was factually correct. Y/N/U Y/N/U
If no, briefly explain._____

c. POEMs (patient-oriented evidence that matters) was presented Y/N/U Y/N/U
If no, briefly explain. _____

3. Techniques of Promotion Used (check any that were used for all drugs)
____ "Broke the ice" with humor or a story
____ Repeated product name or advantages
____ Illustrated with headline, diagram, etc.
____ Gifts or tokens given
____ Positive feedback given
____ Faculty support solicited
____ Promoted active learning by asking questions
____ Acknowledged but de-emphasized other drugs
____ Acknowledged but de-emphasized disadvantages
____ Asked to try drug
____ Incentives given
____ _____

4. Appeals — You should use this drug because . . . (Check any that apply)

Rational Appeals: The STEPS Approach

____ **Safety** (Fewer serious adverse effects)
____ **Tolerability** (Compare pooled "dropout rates")
____ **Effectiveness** (Using "intention-to-treat" analysis with POEM outcomes)
____ **Price** (Consider overall cost of treating disease)
____ **Simplicity** (Ease of use, concerns for interactions)

Non-Rational Appeals

____ Testimonial ("Case report")
____ Appeal to Authority ("Dr. _____ uses this drug")
____ Bandwagon Appeal ("Everyone's using this drug")
____ Red Herring Appeal (Factual but irrelevant data)
____ False Cause (Effect inappropriately linked to drug)
____ Appeal to Pity ("Help me out by giving it a try")
____ Ad Hominem (Attacking other company, other reps, etc)
____ Appeal to Fear (Fear of litigation, patient dissatisfaction, etc)
____ Appeal to Curiosity (Interesting, but not clinically relevant feature of the product)
____ Ego Gratification (You'll feel better if you prescribe this drug)

5. Overall Impression

	Strongly Agree				Strongly Disagree
a. The representative was knowledgeable regarding his or her product(s).	1	2	3	4	5
b. The representative answered questions appropriately.	1	2	3	4	5
c. The representative appeared to be comfortable when presenting and answering questions.	1	2	3	4	5
d. The information presented is useful.	1	2	3	4	5
e. The information presented confirmed that I am doing the right thing.	1	2	3	4	5
f. I will change my practice in some way as a result of the information presented.	1	2	3	4	5

Figure 3 Pharmaceutical representative feedback form.

what they are—sales techniques used to increase product identification and place the product in a positive light.[5,12]

The pharmacologic information is reviewed on the basis of both rational appeals and nonrational appeals. Nonrational appeals to consider prescribing a medication are often made to physicians during a detail session and include testimonials, appeal to authority, bandwagon appeal, red herring appeal, false cause, appeals to pity, fear, curiosity, and ego gratification.[5] Again, by identifying these types of appeals, we hope to increase participant knowledge of how they may be used to encourage use of the product. To review the rational appeal, we implement the STEPS approach.[11] The focus is on **S**afety, **T**olerability, **E**ffectiveness, **P**rice, and **S**implicity. The standards for comparison are other medications available in the same class. Safety covers serious adverse effects and interactions compared with similar medications. Tolerability is assessed based on pooled dropout rates from medication trial participants. Effectiveness is evaluated based on intention-to-treat with patient-oriented outcomes. Price is considered when reviewing the overall cost of the medication compared with comparable agents and the cost of treating the disease. Simplicity covers the ease of use and need to be concerned for interactions. Participants are asked to decide whether they have enough information based on the representative's presentation to evaluate along these parameters. If it becomes clear during the discussion that this information was not adequately covered during the detail, a question is then formulated to ask to the pharmaceutical representative once he or she rejoins the discussion to see whether the information can be obtained.

Pharmaceutical Representative Rounds concludes with the faculty moderator facilitating a summary of the information presented as the group attempts to identify the role the product will play in current practice. If it is determined that more information is needed to further this discussion, the representative is invited rejoin the group for a short question and answer session. At times, additional evidence-based information is needed to identify the medication's role. In such instances, residents are encouraged to develop an answerable clinical question, review and critically appraise the evidence, and present their findings during our Critical Appraisal Rounds (formerly Journal Club).[13-17]

Discussion

A review of direct-to-consumer pharmaceutical advertising in 2003 revealed that every $1.00 spent on advertising resulted in an increase in prescription sales of $4.20.[18] Understanding the role that marketing plays in medication cost and how that contributes to the overall expense of health care is important information for osteopathic family physicians to know. Rather than simply ignoring pharmaceutical representatives, we encourage the reader to deliberately evaluate interactions with health care marketing professionals and use an approach that is in line with the AOA Code of Ethics. The goal is to ultimately enhance patient care. Although we have yet to develop a method to measure changes in knowledge, attitude, or skills with the educational program outlined here, we feel that physicians must interpret the marketing information that they encounter on a regular basis. This type of learning is a movement toward a more evidence-based practice of medicine.

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