Though the field of medicine is often thought to transcend monetary trivialities, even medical doctors can be influenced heavily by the incentives provided by pharmaceutical companies. Despite the industry’s claims, pharmaceutical companies spend twice as much on promotion and marketing as they do on research and development. It has been estimated that more than $11 billion a year is spent in such advertising ($5 billion of which goes to pharmaceutical representatives), with between $8000 and $13000 spent on each physician. Given that 2.2 billion drug prescriptions are written each year in the United States, the relationship between pharmaceutical companies and doctors is an ongoing topic of controversy, since the apparently harmless gifts that pharmaceutical representatives provide to physicians have been shown to influence prescription practices.

The Interaction Between Pharmaceutical Companies and Physicians
The relationship between pharmaceutical companies and medical doctors starts as early as medical school. Studies show that 85% of medical students believe it is not acceptable for a politician to accept a gift, but only 46% think that it is inappropriate for themselves to accept a comparable gift from a pharmaceutical company. Physicians (residents and faculty alike) meet with pharmaceutical representatives up to four times a month. As a result of these interactions, residents are often provided with drug-sponsored meals and samples, whereas faculty are given more honoraria, conference travel, and research funding. One study of 164 primary care residents showed that 98% ate a meal sponsored by a pharmaceutical company and 97% had a logo-bearing item with them at the time of the survey. Even more shock-
ing is the rare company, such as the manufacturer of Gabapentin, that publishes its own articles and contracts medical education companies to write review papers, original articles, and letters to the editor about the drug, with each article fetching up to $18,000, with $1000 being paid to the physician or pharmacist author. Though an obvious breach of ethical considerations, such activities are apparently legal or, at best, in a “gray zone” of legality.3,4

**The Pharmaceutical Company’s Point of View**

In 1976, *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.* struck down a law preventing pharmacies from advertising the prices of prescription drugs, thus protecting ‘commercial speech,’ defined as “speech proposing a commercial transaction.”3,6 The value of disseminating information was commended as an important resource for physicians.3 It is often difficult for medical doctors to keep up-to-date with regards to all the new medications that are being developed, given that there are nearly 150,000 medical journals. Pharmaceutical companies provide a more efficient alternative to learning about the newest drugs on the market. Furthermore, medical journals, medical societies, and fellowship programs require funds from the pharmaceutical industry to survive in the first place.4 And, the profits that drug companies make are simply used to develop more drugs for the betterment of the health field and to fund other academic endeavors, as described above.

**The Doctor’s Point of View**

One researcher analyzed, through a MEDLINE search, more than 500 studies conducted in English-language articles. It was shown from this survey that residents and physicians alike believe that representatives provide accurate information about their products, but at the same time, they also think that representatives prioritize sales over the general welfare of the patients. They do not believe that gifts can influence their behavior, yet also agree that without such incentives, the number of meetings with pharmaceutical representatives would be reduced.1 Dr. John Doe, an interviewee, said of such meetings, “I’m overworked. I’m underpaid. I’m besieged on all sides by insurance companies. The only solace I get all day is a sales rep taking me to dinner and not complaining about anything.” But, most physicians do not realize that pharmaceutical representatives receive lists of the prescriptions written by every doctor visited, which they then use to perfect their sales pitches.4 Thus, it appears that most physicians suffer from a lack of awareness regarding the dynamics of their relationship with pharmaceutical representatives; they do not purposely conspire with pharmaceutical companies to gain access to material benefits in exchange for customers.

**Repercussions for the Patient**

The problem, however, is that even though physicians believe that the influence exerted upon them by pharmaceutical representatives is minimal, studies have shown that this is not the case. Although doctors who frequently interact with pharmaceutical representatives demonstrate an improved ability in identifying the treatments in more complicated cases, they also are less able to identify inaccurate claims about medications, demonstrate a more positive attitude toward pharmaceutical representatives, prefer and rapidly prescribe the advertised drug, and routinely request new medications that do not hold significant advantages over existing ones. Such behaviors have led to an increased rate of prescription in general, as well as an increased rate of prescription of brand name (over generic) medications with no scientifically proven advantages.1 Physicians, who may receive hundreds of thousands of dollars in free drug samples annually, simply reach into their cabinet and tell patients, “Here, start on this, and let’s see how it works.” But,
the question is, were it not so readily available, would that particular drug have been the drug of choice? One study showed that, given free drug samples, residents’ prescription of the same brand name drug increased from 36% to 43%. Another study showed that when physicians were prohibited from receiving samples, prescription of generic medication increased from 38% to 61%. And, the difference in price between brand name and generic can be staggering – Nexium (used to treat conditions involving excessive stomach acid) is sold at $125.99 for 30 pills compared with its over-the-counter version, at $19.99 for 28 pills. Combined with the fact that, as determined by one study on the treatment of cardiovascular disease, generic and brand name drugs generally demonstrate clinical equivalence, medical doctors’ increased rate of prescription of brand name drugs is unacceptable, especially in a recession economy. 

**THE EXAMPLE OF OXYCONTIN**

In 2001 alone, Purdue Pharma spent $200 million promoting OxyContin, a pain-relieving opioid-based drug. From 1996 to 2001, Purdue conducted 40 all-expenses-paid symposia at resorts in Florida, Arizona, and California, which saw the attendance of 5000 physicians, pharmacists, and nurses. Purdue profiled individual physicians in order to understand their prescribing habits and then targeted doctors who demonstrated a high preference for the prescription of opioids. Sales representatives directed their attention to these doctors, encouraged by a bonus system that rewarded them for increased sales in their territories. In 2001, annual bonuses averaged $71,500 (in addition to an annual salary of $55,000). The sales representatives provided physicians with coupons that provided patients with a free prescription for up to a 30-day supply; by the time the promotion ended, 34,000 coupons had been redeemed nationally. According to the Drug Enforcement Administration, the distribution of fishing hats, stuffed toys, and music CD’s was unprecedented for a drug of this nature.

Purdue’s campaign promoted a more liberal prescription of opioids amongst primary care physicians, though experts were concerned that such doctors were not well-trained in pain management or addiction. Primary care physicians also had the least time for follow-ups with patients to whom they prescribed OxyContin. Furthermore, sales representatives were taught to say that the chances of addiction were less than 1%. Coupled with the fact that the drug was so readily available (due to the high number of OxyContin prescriptions), it is perhaps not surprising to learn that, in 2004, it was considered to be the leading drug of abuse in the United States.

**CONCLUSIONS**

Even physicians are not immune to the effects of marketing. As a result, several professional societies, the American College of Physicians and the Accreditation Council for Continuing Medical Education, have developed guidelines in order to tackle the problem. For example, the American Medical Association suggests that physicians accept no cash and gifts of substantial value, although it approves meals and free samples for patients and doctors. But, only 23% to 50% of residents even know of the existence of such guidelines, while 62% of physicians know of at least one guideline. Thus, there is a lack of awareness regarding the existence of the guidelines, let alone what they entail. Furthermore, it has been shown that simply reading the guidelines does not influence whether or not physicians accept gifts from pharmaceutical representatives; only enrollment in an organization with guidelines does (for example, the American Medical Association has published “Ethical Guidelines for Gifts to Physicians from Industry”).

Guidelines have also been published for pharmaceutical companies. Just recently, the Pharmaceutical Research and Manufacturers of America (PhRMA) developed a set of guidelines that bars pharmaceutical companies from distributing office supplies, clothes, and other gifts with company logos to physicians and clinics. In addition, companies cannot pay physicians’ meals and must allocate the responsibility of providing grants for continuing medical education to personnel not associated with the sales and marketing departments. Though these guidelines are voluntary, PhRMA is developing a directory of companies that comply with them. Though some physicians “applaud the gift ban, others seem offended by the insinuation that a ballpoint pen could turn their heads.” Although several states have laws that require that financial gifts made to doctors be identified, the general consensus is that the laws have not been working. But, recently, state officials in Massachusetts passed regulations that, starting July 1, prevent pharmaceutical...
Such gifts that prominently display a pharmaceutical company’s logo are commonly found in doctor’s offices.

WORKS CITED


IMAGE SOURCES

Nexapro

OxyContin Tablets
http://oxycontin-addiction.org/img/oxy.jpg

OxyContin Structure
http://upload.wikimedia.org/wikipedia/commons/9/9b/Oxycodone.svg

Nexium Tote