

**Topic:** What have you learned in medical school about the relationship between pharmaceutical promotion and physician prescribing, and how could that aspect of your education be enhanced?

Number one on my post-USMLE Step 1 Exam To-Do List: tackle the mountain of papers accumulated atop my desk. Buried beneath the nearly-overdue utility bills and greasy fast food receipts, I unearthed a 3x3 inch sticky note upon which I had long ago scribbled, “Pharmaceutical marketing essay contest – deadline 2/29/08.” Evidently preoccupied while scrawling this reminder, I’d failed to notice the words emblazoned in the upper left-hand corner of my note: “Cymbalta (duloxetine HCl) Delayed Release Capsules.” This ironic discovery was enlightening. With the exception of an occasional free lunch, I’d always assumed that as a medical student I was relatively protected from pharmaceutical influence. But now as I reflect upon the impact of pharmaceutical promotion on physician prescribing, a glance at the Evista and Topamax scratch pads on my now spotless desk reveals the pervasiveness of pharmaceutical marketing. Given my pre-existing wariness of the cozy relationship between the pharmaceutical industry and physicians, I am embarrassed by the realization that my acceptance of “nominal gifts” has only strengthened this bond. Regrettably, my interaction with the pharmaceutical industry is commonplace among medical students.

My school addresses the physician-pharmaceutical relationship in multiple years of the curriculum. In our first-year ethics course, the influence and intensity of pharmaceutical marketing are discussed prominently in both lecture and small-group settings. Additionally, a grand rounds presentation during the third-year internal medicine clerkship highlighted the accumulating body of research linking even the most trivial pharmaceutical freebies to skewed prescribing practices. This research reinforces the theory of reciprocal altruism – primates (and apparently physicians) are evolutionarily wired to repay indebtedness for even the smallest of gifts. Despite this universal urge, evidence suggests a disconnect between physicians’ views of themselves versus their perception of colleagues. Research shows that doctors consistently characterize themselves as stalwarts immune to the influence of petty gifts, yet they perceive other physicians as easily swayed by the lure of pharmaceutical marketing. Despite receiving education to the contrary, medical students believe that they too are impervious to the implied reciprocity of indebtedness.

While rotating on neurology, the clerkship director moderated a medical student discussion on the ethics of accepting free handouts from drug reps. Ironically, the neurology clerkship offered free lunches for medical students, residents, and faculty; the chief resident even contacted drug reps to ensure a daily availability of free lunch. During the ethics discussion, several fourth-year medical students emphatically insisted that accepting token gifts and free food from pharmaceutical companies would not influence their prescribing practices. They considered themselves astute masters of the system, eager to procure free amenities at the expense of the pharmaceutical companies without returning any favors. They argued that by knowing the thinly-veiled intent of the gifts, they could consciously suppress any intended influence or desire to reciprocate. Not surprisingly, these students suggested that “other medical students” would likely succumb to pharmaceutical marketing influence. The persistence of this fallacious argument suggests that weaning medical students from pharmaceutical industry influence will require more than ethics discussions and research overviews.

The evidence clearly indicates that pharmaceutical promotion is having its intended effect on physician prescribing habits. Doctors disproportionately prescribe newer, more expensive drugs that are frequently no more efficacious than older generic equivalents. These prescribing practices are irresponsible; they contribute to escalating healthcare costs and tarnish the virtue of evidence-based medical practice. Even when confronted with the convincing evidence, many medical students fail to reject the excesses of our predecessors. Though we do not yet wield prescription pads, our thoughts and actions foreshadow how we will behave as physicians if pharmaceutical companies' unrestricted access to students continues.

Intensified educational efforts are unlikely to solve the vexing problem of pharmaceutical influence. Students are aware of the evidence and the ethical pitfalls, yet still continue accumulating indebtedness to the pharmaceutical industry one notepad at a time. The voluntary refusal of gifts is noble, but it is also highly unlikely to occur within a profession accustomed to receiving them unsolicited. I therefore advocate that medical schools actively break this cycle of influence by prohibiting pharmaceutical representatives from bestowing gifts of any kind upon students, residents, and faculty. Academic institutions undertake the formidable task of educating medical students to become the next generation of ethically-responsible physicians. Thus, these same institutions have an obligation to assume a leading role in reversing prescribing habits based on favors, while restoring prescribing habits based exclusively on what is best for each individual patient.