Clinical Ethics

The ethics of pharmaceutical industry relationships with medical students

Wendy A Rogers, Peter R Mansfield, Annette J Braunack-Mayer and Jon N Jureidini

MJA 2004; 180 (8): 411-414

Abstract

- Little research has been done on the extent of the relationship between the pharmaceutical industry and medical students, and the effect on students of receiving gifts.
- Potential harms to patients are documented elsewhere; we focus on potential harms to students.
- Students who receive gifts may believe that they are receiving something for nothing, contributing to a sense of entitlement that is not in the best interests of their moral development as doctors.
- Alternatively, students may be subject to recognised or unrecognised reciprocal obligations that potentially influence their decision making.
- Medical educators have a duty of care to protect students from influence by pharmaceutical companies.

THERE IS GROWING DEBATE about the ethics of relationships between the pharmaceutical industry and the medical profession. 1,2 Concerns include bias in research funded by the pharmaceutical industry 3 and conflicts of interest with regard to prescribing by medical practitioners who accept industry gifts and hospitality. 4,5 The ethical bottom line is that this

relationship can and does lead to harm to patients: at an individual level through inappropriate prescribing, and at a social level through the rising opportunity costs associated with the unwarranted use of more expensive pharmaceuticals.

To date, there has been little debate about the ethics of pharmaceutical industry relationships with medical students. After all, students are not in a position to prescribe, so perhaps the same arguments do not hold. In this article, we argue that, despite students' lack of prescribing power, there are serious ethical issues that should be considered by medical educators and students when making decisions about relationships with the pharmaceutical industry.

Potential harms to medical students

Most of the harms we consider here are harms to the social and moral character of students. Our analysis turns on two assumptions: first, that the characters of medical students are shaped in important and long-lasting ways by their medical education; and second, that some character traits are ethically more desirable than others. The first assumption is supported by research into the socialisation processes of medical training. which suggests that students take on their medical identities in line with prevailing medical mores. 8,9 The second assumption, that some character traits are more ethically desirable than others, draws upon the traditions of virtue ethics in medicine. Virtue ethics is concerned with the kinds of abilities and attitudes that doctors need to develop and maintain to act morally in their profession. The list includes virtues such as benevolence, compassion, integrity and trustworthiness, respectfulness, honesty and justice. 10 In contrast, medical vices have been described as character traits that accompany

the wrong kinds of ultimate commitments, for example to money, to power, to science, or to self.11

Implications of pharmaceutical gift giving

What happens when a representative from a pharmaceutical company gives a gift to a medical student, be it a free meal, pen, stethoscope, or sponsorship of a conference? Gift-giving invokes the reciprocity rule, which creates a feeling of indebtedness in the recipient together with the desire to repay the favour in some way. 4,5 Awareness of this obligation underlies our reluctance to accept gifts from those we would prefer not to be indebted to, or when we do not know what is expected in return. With gift-giving to medical practitioners, the obligation, although often tacit, is very real: prescribe this company's drugs rather than any other alternatives. Because medical students do not have the power to prescribe, they may regard themselves as being free from reciprocal obligations to gift-giving pharmaceutical companies. This leaves us with two main possibilities: either the medical students are truly getting something for nothing, or they are becoming indebted to the pharmaceutical industry, knowingly or unknowingly. In the next section we explore the moral implications of each of these possibilities.

Something for nothing

Some students will receive material advantage and experience pleasure when they receive gifts from pharmaceutical companies, even if small gifts such as pens and free meals are unlikely to have a significant effect on students' quality of life. Larger gifts, such as bursaries and sponsorship of meetings, may have a more significant effect.

Medical students will rarely, if ever, be able to gain these benefits for nothing, because drug companies are sophisticated. However, the moral harms that could arise if students successfully exploited drug companies, or believed that they did, deserve consideration. Exploiting any person or organisation is unethical and incompatible with the moral character development required for optimal patient care. To accept gifts without accepting reciprocal obligations is to operate outside of conventional moral expectations — in other words, to be a free rider. Is this exception to social norms about gifts similar to other exceptions that medical students are expected to make during their training, such as asking probing questions and performing intimate examinations? During their training, doctors come to take for granted many of the privileges necessary for patient care. There is a danger that accepting free gifts might be seen as just another medical privilege, inducing an unwarranted sense of entitlement among future doctors.12

Normalising something-for-nothing relationships risks a decreased sensitivity to the moral implications of unequal relationships. Medical educators must ask themselves if feelings of entitlement and a readiness to feel wronged in the absence of gifts are the kinds of character traits that they would like to encourage in students.

Something for something: hidden strings and reciprocal obligations

What harms occur if students, more or less knowingly, take on reciprocal obligations to the pharmaceutical industry when they accept gifts? The implications vary with the degree of awareness. If students are fully aware that pharmaceutical companies' gifts to doctors lead to inappropriate prescribing,

and students accept that they are similarly likely to be influenced, then gift-taking involves a decision knowingly to compromise the interests of patients. Students may justify this behaviour by appeals to what is "normal", because they see their teachers and other doctors accepting industry gifts. Students may feel that it would be unfair for them to miss out on benefits that others are receiving. Psychological research indicates that humans have a "self-serving bias" that skews judgements about what is fair in their own favour.4 This bias can be both unintentional and unconscious, so that students may be unaware that behaviour that they feel is justified may be judged otherwise by people not sharing the benefits. Interestingly, students from healthcare disciplines who are not offered gifts from the pharmaceutical industry perceive accepting gifts to be wrong. 13 These factors may help to explain why medical students often express anger or resentment if they are challenged to refuse gifts.

It is more likely that students act with less than perfect knowledge. At some level they may realise that there is no such thing as a free lunch, but for various reasons may prefer not to think about and accept the implications. It is common for humans to understand that others are vulnerable to being misled by marketing techniques without accepting that they personally are also vulnerable. 14 This illusion of unique invulnerability leads many doctors to believe that promotions may influence the prescribing of other doctors, but do not influence their own prescribing. 4 Demonstrating vulnerability to industry techniques may be a powerful way of changing students' attitudes, but, to date, the only published example involves covert methods, which raise their own ethical issues. 15

A further significant harm is that accepting gifts potentially silences medical students as critics of industry–profession

relationships. This means that society loses the important contribution to reform provided by young people who have not yet accepted "normal" professional behaviours. 17 Given that any "freebies" for students are in fact paid for by patients and healthcare services, whose pharmaceutical costs necessarily include the cost of marketing, this loss of integrity is acute. The cost of drug promotion in Australia was around \$1–\$1.5 billion in 2003.18

Evidence of harm to students

As well as the justifications outlined above, students may appeal to the lack of empirical evidence that students' accepting gifts leads to future inappropriate prescribing. There is no published research comparing the attitudes and prescribing habits of students exposed to pharmaceutical representatives during medical school with those protected from such influences. However, there is evidence that limiting pharmaceutical industry contacts during postgraduate training produces specialists who perceive drug company information as less useful, and who see industry representatives less frequently than specialists who were exposed during training. 18,19 This finding is important, because perceived usefulness of drug company information and increased frequency of seeing company representatives are both risk factors for less appropriate prescribing.6,7 Consequently, the onus of proof is on those who would claim that medical students are different from postgraduate trainees.

A study looking at students' recall of pharmaceutical companies responsible for giving students textbooks found that less than a quarter of students could recall the company involved. 20 A similar lack of recall of sponsors' identities has been found among doctors, but, despite this, sponsorship has

been demonstrated to be effective in increasing inappropriate prescribing of the relevant drugs. 21 The implication is that the gifts of books to students by pharmaceutical companies can be harmful and effective without students being aware of it.

The fact that drug companies give gifts to medical students suggests the companies have evidence that gifts to students provide a return on investment.

Even if there is no direct effect on the future prescribing of specific products, the goodwill engendered by receiving gifts may be invaluable to the industry in terms of paving the way for future access and influence once students are qualified and able to prescribe. 20 Pharmaceutical representatives put a lot of time and effort into personal relationships with "their" doctors, indicating the importance of relationships within their overall strategies. Because students may be flattered by the attention, as well as pleased by gifts from representatives, a strategy of no contact may be the best way to avoid establishing relationships of this type.

Duty of care to students

If industry contact with students leads to suboptimal patient care through inappropriate prescribing, medical educators have a duty of care both to protect their students from these influences and to protect their students' future patients from the harms of inappropriate prescribing. Would this entail the prohibition of all industry presence in medical schools and training hospitals and general practices where students are placed?

This is the view taken by Kassirer, who has published extensively on conflict of interest in medicine. He argues that

medical schools should "teach that there is no free lunch. No free dinner. Or textbooks. Or even a ballpoint pen".22 His view is shared by the American Medical Student Association, which has a PharmFree policy (Box 1) and pledge for medical students (Box 2). Developing a policy on relationships with drug companies during 2004 was a major agenda item at the Australian Medical Students Association National Council meeting on 12–15 February 2004 (Mr Matthew Hutchinson, National President, Australian Medical Students Association, personal communication). As part of their process, the AMSA National President invited Peter Mansfield to contribute to the discussions. Policies of prohibition run the risk of making the prohibited activities seem all the more desirable. Medical schools and students' societies instituting such policies should put considerable time and effort into both explaining the reasoning behind their policy, and ensuring that all staff comply with it in their own practices.

One alternative approach would be to ensure that students give their informed consent before being exposed to industry influences. Discussion of how this might occur is beyond the scope of this article, but it would need to include demonstration of the power of marketing techniques, skills in appraisals of evidence about efficacy of drugs, and information about the scale and costs of the harms that occur to patients through inappropriate prescribing.

Conclusion

Both the ethical arguments and the limited available empirical evidence lead to the conclusion that the best policy is for medical students to have no contact with drug companies. The onus is on advocates of any other policy to show that they can achieve better outcomes.

1: American Medical Student Association's Modified CAGE Questionnaire and 4 Step Program

The Modified Modified CAGE Questionnaire

- Do you Crave drug company catered food?
- Are you Angry when someone else takes the last Viagra pen?
- Do you carry a Grab bag when there are drug company goodies available?
- Do you feel Entitled to free stuff because you are swamped with debt?

If you answered YES to any of these questions, then read on . . .

AMSA's 4 Step Program to Stop the Addiction:

Suggestions for Student Intervention

Step 1. Educate Yourself

(eg, visit www.nofreelunch.org and www.healthyskepticism.org)

Step 2. Purify Yourself

(eg, take the PharmaFree pledge, switch to independent sources for drug information and switch pens with the No Free Lunch pen exchange program)

Step 3. Educate Others

(eg, use the educational resources developed by AMSA in association with No Free Lunch)

Step 4. Build a Coalition and Make Change

(eg, follow the suggestions on the AMSA website)

Source: American Medical Student Association's PharmFree Campaign (www.amsa.org/prof/pharmfree.cfm, accessed Feb 2004), developed in association with No Free Lunch (www.nofreelunch.org, accessed Feb 2004).

2: American Medical Student Association's PharmFree Medical Student Pledge

I, _______, am committed to the practice of medicine in the best interests of patients and to the pursuit of an education that is based on the best available evidence, rather than on advertising or promotion.

I, therefore, pledge to accept no money, gifts, or hospitality from the pharmaceutical industry; to seek unbiased sources of information and not rely on information disseminated by drug companies; and to avoid conflicts of interest in my medical education and practice.

Source: American Medical Student Association's PharmFree Medical Student Pledge (www.amsa.org/prof/pledge.cfm, accessed Feb 2004)

Acknowledgements

Wendy Rogers was supported by an NHMRC fellowship during the preparation of this article. Peter Mansfield is supported by an NHMRC Public Health Postgraduate Scholarship.

Competing interests

Peter Mansfield and Jon Jureidini are Director and Chair, respectively, of Healthy Skepticism, an organisation that aims to improve health by reducing harm from misleading drug promotion. The content of the article and decision to submit were the sole responsibility of the authors.

References

- Komesaroff P, Kerridge I. Ethical issues concerning the relationships between medical practitioners and the pharmaceutical industry. *Med J Aust* 2002; 176: 1118-1121. < <u>PubMed><eMJA full text></u>
- Wazana A. Physicians and the pharmaceutical industry: is a gift ever just a gift? *JAMA* 2000; 283: 373-380.
 <PubMed>

- Lexchin J, Bero LA, Djulbegovic B, Clark O.
 Pharmaceutical industry sponsorship and research outcome and quality: systematic review. *BMJ* 2003; 326: 1167-1170. < PubMed>
- Dana J, Loewenstein G. A social science perspective on gifts to physicians from industry. *JAMA* 2003; 290: 252-255. <a href="https://pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-pubmed-p
- 5. Katz D, Caplan AL, Merz JF. All gifts large and small: toward an understanding of the ethics of pharmaceutical industry gift giving. *Am J Bioethics* 2003; 3: 39-46.
- Caamano F, Figueiras A, Gestal-Otero JJ. Influence of commercial information on prescription quantity in primary care. *Eur J Public Health* 2002; 12: 187-191.
 <PubMed>
- 7. Watkins C, Harvey I, Carthy P, et al. Attitudes and behaviour of general practitioners and their prescribing costs: a national cross sectional survey. *Qual Saf Health Care* 2003; 12: 29-34. < PubMed>
- 8. Mansfield PR. Bribes for doctors: a gift for bioethicists? *Am J Bioethics* 2003; 3: 47-48.
- Stern DT. Practicing what we preach? An analysis of the curriculum of values in medical education. Am J Med 1998; 104: 569-575. < <u>PubMed></u>
- 10. Pellegrino ED, Thomasma DC. The virtues in medical practice. New York: Oxford University Press, 1993.
- 11. Rogers WA, Braunack-Mayer AJ. Practical ethics for general practice. Oxford: Oxford University Press, 2004.
- 13. Palmisano P, Edelstein J. Teaching drug promotion abuses to health profession students. *J Med Educ* 1980; 55: 453-455. < PubMed>
- 14. Sagarin BJ, Cialdini RB, Rice WE, Serna SB. Dispelling the illusion of invulnerability: the motivations and

- mechanisms of resistance to persuasion. *J Pers Soc Psychol* 2002; 83: 526-541. Pers Soc Psychol 2002; 83: 526-541. PubMed>
- 15. Wilkes MS, Hoffman JR. An innovative approach to educating medical students about pharmaceutical promotion. *Acad Med* 2001; 76: 1271-1277. < PubMed>
- 16. Wolfe SM. The destruction of medicine by market forces: teaching acquiescence or resistance and change? Acad Med 2002; 77: 5-7. < PubMed>
- 17. Healthy Skepticism. Estimated spending on drug promotion in Australia in 2003. Available at: www.healthyskepticism.org/promotion/spending.htm (accessed Oct 2003).
- 18. McCormick BB, Tomlinson G, Brill-Edwards P, Detsky AS. Effect of restricting contact between pharmaceutical company representatives and internal medicine residents on post training attitudes and behavior. *JAMA* 2001; 286: 1994-1999. <PubMed>
- Brotzman GL, Mark DH. The effect on resident attitudes of regulatory policies regarding pharmaceutical representative activities. *J Gen Intern Med* 1993; 8: 130-134. < PubMed>
- 20. Sandberg WS, Carlos R, Sandberg EH, Roizen MF. The effect of educational gifts from pharmaceutical firms on medical students' recall of company names or products.

 Acad Med 1997; 72: 916-918. < PubMed>
- 21. Spingarn RW, Berlin JA, Strom BL. When pharmaceutical manufacturers' employees present grand rounds, what do residents remember? *Acad Med* 1996; 71: 86-88. <PubMed>
- 22. Kassirer JP. A piece of my mind: financial indigestion. *JAMA* 2000; 284: 2156-2157. < PubMed>

(Received 14 Oct 2003, accepted 17 Feb 2004)

Department of Medical Education, Flinders University, Adelaide, SA.

Wendy A Rogers, PhD, FRACGP, Associate Professor.

Healthy Skepticism, Willunga, SA.

Peter R Mansfield, BMBS, Director.

Department of Public Health, University of Adelaide, SA.

Annette J Braunack-Mayer, BMedSci(Hons), PhD, Senior Lecturer.

Department of Psychological Medicine, Women's and Children's Hospital, North Adelaide, SA.

Jon N Jureidini, MB BS, PhD, Head.

Correspondence: Associate Professor W A Rogers, Department of Medical Education, Flinders University, GPO Box 2100, Adelaide, SA 5001.

wendy.rogersATflinders.edu.au

AntiSpam note: To avoid spam, authors' email addresses are written with AT in place of the usual symbol, and we have removed "mail to" links. Replace AT with the correct symbol to get a valid address.

©The Medical Journal of Australia 2004 www.mja.com.au
ISSN: 0025-729X