Occasional essay

Can a doctor enjoy a medical company's generosity without prescribing its products?

"Would you rather me prescribe a drug to you or one of your family that I thought would work or would you rather my prescribing habits be influenced simply by drug promotion?" I said to the 'Rep' who persisted in trying to get me to prescribe one of his company's recently PBS listed 'wonder' drugs.

"Well if I am critically ill with severe sepsis, I hope that you would use our drug" the 'Rep' responded.

Touché, I thought, use an emotional argument and you will get an emotional response.

The relationship between the medical profession and industry (i.e. pharmaceutical and instrument manufacturers and distributors) is an interesting one. Informally, we receive their representatives at our office with indifference, banter with them at the trade display, give the trinkets they have on offer to our children (or grandchildren) and plead with them when we want financial support for research, travel or sponsoring for our scientific meetings. Nevertheless, within the formal relationship there is a code of conduct. For example, it is unethical to accept remuneration for participating in advertising or promotion of products. On the other hand, it is acceptable to provide services that include *bona fide* consultation, legal testimony and institutionally approved product testing, evaluation and development and experimental and clinical research.

While some companies appear to give money with 'no strings attached', medical corporations are no more altruistic with shareholders equity than any other business. No company gives away its shareholder's money in an act of disinterested generosity, so arrangements with the medical profession will only be entered into if they enhance the company's market share. However, some of these agreements (e.g. direct research grants, fees for expert testimony, ownership of equity or options thereon, patent royalties, fees for consulting, honorariums for lectures) raise issues of conflict of interest and bias.

Bias induced by conflict of interest works subtly and is not the same as dishonest behavior, which is why the double blind randomised controlled trial is so crucial to the scientific test. The International Committee of Medical Journal Editors defines conflict of interest, when an individual (e.g. author, reviewer, editor) has financial or personal relationships with other persons or organisations that inappropriately influence (bias) his or her actions.[1,2]

There are several instances in which medical industry funding may have influenced the conclusions of published articles.[3,4] In an epidemiological study of randomised clinical trials published in the British Medical Journal (BMJ) from January 1997 to June 2001, the authors conclusions significantly favored the experimental interventions when financial competing interests (i.e. funding by for-profit organisations) were present, whereas other competing interests (e.g. personal, academic or political) did not appear to be significantly associated with the authors conclusions.[5]

Nevertheless, to attempt to abolish all conflict of interest is impossible, and one may argue that the only person who does not have some sort of vested interest in a subject is somebody who knows nothing about it.[6] The BMJ's policy concerning conflict of interest is that it should be disclosed but not prohibited, as the disclosure will allow the reader to consider this along with many other factors when making his or her judgment on the value of a study or report.[7] Editors of other journals, have also established policies to ensure that the financial associations of authors are disclosed and that published articles are not influenced unduly by these associations.[8-17]

From an industry point of view, there is a belief that markets work on the principle that a product brings benefit to the user. If the product is not beneficial, there is no market, or if the product is harmful the market will respond adversely, so it is not in the interests of a company to publish false facts or promote a useless (or harmful) product. Yet I wonder whether this reflects the truth. The tobacco industry highlights some of the activities that will occur, particularly when a CEO of a company is prompted to focus on short-term market gains. Currently, there are whole university medical school departments that operate as subsidiaries of pharmaceutical companies.[18] They dictate terms of the trial, which may not necessarily be in the best interests of study participants or the advancement of science, and data may not be able to be examined independently.[19] In an attempt to gain a positive result, trials may use inappropriate controls (e.g. a dosing of two drugs that favors the experimental drug compared with the control drug[20]) or choose a narrow population base and extrapolate the conclusions inappropriately to a broader population affected by the condition.[21,22] Moreover, ghostwriting entire medical research articles is now not uncommon,[23,24] where third party agencies - funded

wholly by drug and device manufacturers - form partnerships with investigators to ensure that manuscripts submitted for publication have the proper spin. Information for physicians is carefully orchestrated with more than 100 for-profit medical communication companies to choose from.[25] So long as a drug does no harm, if it has promising experimental (and clinical) data and a pathophysiological mechanism that sounds reasonable, the rest may simply become a marketing exercise to hawk the product.

The selling of products through the use of not-for-profit organisation names and logos in advertising is a new trend as the industry understands that consumers place a high level of trust in nonprofit organisations, believing that products that carry an endorsement by the nonprofit organisation are superior to other competing products. In Australia we are only just beginning to see these effects. I was interested to read the title 'View from ANZICS' in a drug company publication reporting the use of drotrecogin alfa (activated) rhu (intensive care news; issue 1: October 2002). A closer look revealed that the title simply alerted the reader to a column that Professor Tony McLean would provide in future issues concerning updates 'on the intensive care world'. It was unclear if his title (President of the Australian and New Zealand Intensive Care Society) would be of any relevance to his presentation. For example, was it a view of, or report on, ANZICS activities (which are provided in the society's newsletter 'The Intensivist') or was it more significant for the title of the society (ANZICS) to be associated with the drug company's publication and therefore promotion of its products?

The many and varied influences to a practitioner's prescribing habits should be based on unbiased and sound scientific evidence. To the question: "can a doctor enjoy a company's generosity without prescribing its products?" - well for the patient's sake I certainly hope so.

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REFERENCES

1. International Committee of Medical Journal Editors. Conflict of interest. Lancet 1993;341:742-743.
2. Davidoff F, DeAngelis CD, Drazen JM, et al. Sponsorship, authorship, and accountability. Lancet 2001;358:854-856.
3. Bodenheimer T. Uneasy alliance: clinical investigators and the pharmaceutical industry. N Engl J Med 2000;342:1539-1544.
4. Thomas PS, Tan KS, Yates DH. Sponsorship, authorship, and accountability. Lancet 2002;359:351.
5. Kjaergard LL, Als-Nielsen B. Association between competing interests and authors' conclusions: epidemiological study of randomised clinical trials published in the BMJ. BMJ 2002;325:249-252.
6. Choudhry NK, Stelfox HT, Detsky AS. Relationships between authors of clinical practice guidelines and the pharmaceutical industry. JAMA 2002; 287: 612-617.
7. Smith R. Beyond conflict of interest. Transparency is the key. BMJ 1998;317:291-292.
8. Relman AS. Dealing with conflicts of interest. N Engl J Med 1984;310:1182-1183.
9. Rennie D, Flanagin A, Glass RM. Conflicts of interest in the publication of science. JAMA 1991;266:266-267.
10. Koshland DE Jr. Conflict of interest policy. Science 1992;257:595-595.
11. Kassirer JP, Angell M. Financial conflicts of interest in biomedical research. N Engl J Med 1993;329:570-571.
12. Smith R. Conflict of interest and the BMJ. BMJ 1994;308:4-5.
13. Angell M, Kassirer JP. Editorials and conflicts of interest. N Engl J Med 1996;335:1055-1056.
14. The politics of disclosure. Lancet 1996;348:627-627.
15. Campbell P. Declaration of financial interests. Nature 2001;412:751-751.
16. Davidoff F, DeAngelis CD, Drazen JM, et al. Sponsorship, authorship, and accountability. N Engl J Med 2001;345:825-826.
17. Information for Authors. Critical Care and Resuscitation 2002;4:326-328.
18. Piel G. The age of science: what scientists learned in the 20th century. New York: Basic Books, 2001:38-39.
19. Collier J, Iheanacho I. The pharmaceutical industry as an informant. Lancet 2002;360:1405-1409.
20. Rochon PA, Gurwitz JH, Simms RW, et al. A study of manufacturer-supported trials of nonsteroidal anti-inflammatory drugs in the treatment of arthritis. Arch Intern Med 1994;154:157-163.
21. Montaner JS, O'Shaughnessy MV, Schechter MT. Industry-sponsored clinical research: a double-edged sword. Lancet 2001;358:1893-1895.
22. Worthley LIG. Please read the fine print. Critical Care and Resuscitation 2001;3:209-210.
23. Cullen DJ. Ghostwriting in scientific anesthesia journals. Anesthesiology 1997;87:195-196.
24. Rennie D, Flanagin A. Authorship! Authorship! Guests, ghosts, grafters, and the two-sided coin. JAMA 1994;271:469-471.
25. Relman AS. Separating continuing medical education from pharmaceutical marketing. JAMA 2001;285:2009-2012.