

# Pharmaceutical representatives do influence physician behaviour

Gwyn Harris

Harris G. Pharmaceutical representatives do influence physician behaviour. *Family Practice* 2009; **26**: 169–170.

It is not a truth universally acknowledged that pharmaceutical representatives influence physician behaviour. However, the pharmaceutical industry clearly believes they do. In fact so sure are they of this that in 2000, \$4.8 billion dollars were spent in the USA on 'detailing', the one-on-one promotion of drugs by a representative of the company<sup>1</sup>. There is a wealth of anecdotal evidence of changes in behaviour following such marketing. This includes my own experience as a prescribing adviser for a Primary Care Trust (a UK commissioning organization with responsibility for the prescribing budget), where those primary care physicians known to be most receptive to new drugs promoted by pharmaceutical representatives are referred to as 'the lunch bunch'. However, the detailed scientific evidence in the literature is not extensive.

The study by Sønndergaard *et al.*<sup>2</sup> is a clear addition. They assess the impact of pharmaceutical representatives on prescribing behaviour for a new fixed dose combination inhaled corticosteroid and long-acting  $\beta_2$ -agonist (LABA) in Denmark. The study found that there was a greater increase in the market share of the promoted fixed dose combination in those practices that received a visit in comparison to those that did not receive a visit. It did not show an increase in the proportion of patients with asthma receiving inhaled steroids.

The two outcomes were chosen to examine two different suggested aspects of the promotional process. One of these is that it is principally about increasing market share. The other is that it increases disease awareness and appropriate prescribing; in this case, the supposition is that increased steroid prescriptions would represent such an effect. However, it is worth examining the therapeutic context within which this promotion took place. Asthma guidelines had long stressed the need to start inhaled steroids early in treatment with both the US and UK guidelines of 1997<sup>3,4</sup> making this a key treatment point. However,

these two guidelines reflected the then continuing controversy over the exact place of LABAs in treatment. The US guidelines mention them as one of a series of options including oral  $\beta_2$ -agonists and theophyllines after low-dose inhaled steroids, while the UK guidelines placed them as a possible alternative to increasing steroid dosage following use of low-dose steroids. The US guidelines were revised in 2002 to make LABAs the preferred next step after low dose inhaled steroids and the UK guidelines followed suit in 2003. Thus, this study<sup>2</sup> takes place in the context that steroids have been a long-established treatment and the LABA component is the newly prominent treatment. It is therefore not surprising that steroid use is not increased. However, it would be interesting to know whether the overall use of LABAs increased faster in visited practices during this period than in those that had not been visited. If this had occurred, it would show a faster adoption of new prescribing patterns that would represent a probable patient benefit.

With regard to the market share, an increase is associated with the initial visits by representatives. However, the detail is once again worth considering. There was at that time only one other combined product available, 'Seretide' a mix of fluticasone and salmeterol, which had been launched earlier than the studied medicine. In Denmark, fluticasone is prescribed significantly less than the budesonide of this study's inhaler and both are prescribed significantly more than beclomethasone<sup>5</sup>. The studied inhaler therefore might have been expected to obtain a large market share. However, this study shows that market share seems to be tailing off at ~30%. The question is why a more widely used steroid that continues to be more widely used after this study period is being outsold 2:1 by a competitor when formulated as a combination. One possible answer is marketing by the other company. This might suggest that one way to maintain your market share is to continue to target prescribers. It would also suggest that

maintaining the achieved market share might be dependent on the continued visits that show only a modest increase in sales.

Studies into the effect of representative visits have included that by Mizik and Jacobson<sup>6</sup>. This examined similar drug industry data and reported that the marketing activities did have an effect on prescribing behaviour but that the effect was more modest than seen in the current study. Of the three drugs they studied, they believed only one of the three had a sufficiently large change as to justify the level of marketing. The medicines involved are not named in the study, although their marketing class is. The medicine in the current study had the advantage of being the first alternative choice in its therapeutic niche. Thus, it could reasonably be expected to have a larger market penetration than that of a later entrant to the market, magnifying the observed effect of representative visiting over that, which might be expected in a more mature market.

The same principal of one-to-one discussion has also been explored for drug industry-independent information delivery to primary care practitioners. Berings *et al.*<sup>7</sup> looked at rates of benzodiazepine prescribing and randomized three groups of primary care physicians in Belgium to either no intervention, written information only, or additional oral information in an attempt to reduce it. The control group reduced prescribing by 3%, the written group by 14% and the oral group by 24%, a statistically significant difference.

Overall, there is clearly a substantial, though variable, effect from one-to-one drug information delivery. This study adds to our knowledge of the subject and reminds us that there is no such thing as a free lunch; these visits really do result in increased sales.

## Declaration

Funding: none.

Ethical approval: none.

Conflict of interest: none.

## References

- <sup>1</sup> Rosenthal MB, Berndt ER, Donohue JM, Epstein AM, Frank RG. *Demand Effects of Recent Changes in Prescription Drug Promotion*. Henry J Kaiser Family Foundation, 2003. <http://www.kff.org/rxdrugs/6085-index.cf:m> (accessed on 30 April 2008).
- <sup>2</sup> Søndergaard J, Vach K, Kragstrup J, Andersen M. Impact of pharmaceutical representative visits on GPs' drug preferences. *Fam Prac* 2009; **26**: 204–9.
- <sup>3</sup> *Guideline for the Diagnosis and Management of Asthma (EPR-2 1997 and EPR 2 Update on Selected Topic in 2002)*. National Heart Lung and Blood Institute of the National Institutes of Health. [www.nhlbi.nih.gov/guidelines/epr-2/index.htm](http://www.nhlbi.nih.gov/guidelines/epr-2/index.htm) (accessed on 30 April 2008).
- <sup>4</sup> The British Guideline on the Management of Asthma. *The British Guideline on the Management of Asthma 2003*. 1997; <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/PastAsthmaGuidelines/tabid/302/Default.aspx>. (accessed on 30 April 2008).
- <sup>5</sup> Danish Medicines Agency. *Medicinal Product Statistics in Denmark 2003–7*. [www.dkma.dk/1024/visUKLSArtikel.asp?artikelID=11739](http://www.dkma.dk/1024/visUKLSArtikel.asp?artikelID=11739) (accessed on 4 May 2009).
- <sup>6</sup> Mizik N, Jacobson R. *Are Physician's 'Easy Marks'? Quantifying the Effects of Detailing and Sampling on New Prescriptions*. Institute for the Study of Business Markets Report 9-2003, 2003; <http://isbm.smeal.psu.edu/library/working-paper-articles/2003-working-papers/09-2003-are-physicians-easy-marks.pdf> (accessed on 30 April 2009).
- <sup>7</sup> Berings D, Blondeel L, Habraken H. The effect of industry-independent drug information on the prescribing of benzodiazepines in general practice. *Eur J Clin Pharmacol* 1994; **46**: 501–5.