Advertising boosts prescribing of new drugs

• Two recent surveys show that advertising and promotional campaigns (through sales reps and ads in medical journals) have a major effect on the number of prescriptions for recently approved drugs in France. Health professionals and national governments must take note.

rench physicians have long had a propensity to prescribe recently approved drugs (1). In 2001 for example, drugs marketed less than 10 and 5 years represented respectively 38% and 22% of spending for refundable drugs (2).

In comparison, in the same year, drugs marketed for less than 10 years only accounted for 26% of the German national drug bill (2).

Link between advertising, sales reps and prescriptions

A research team belonging to a French health economics institute (IRDES) examined the uptake of "innovative" drugs by French community physicians, and compared the results with the manufacturer's budget for the promotional launch $(\mathbf{a})(2)$.

The authors examined prescribing volume for the period 1992 to mid-1998, as collected by the IMS-Health permanent survey of medical prescriptions, which is based on a panel of 1600 prescribers. They then compared these volumes with manufacturers' promotional budgets for the products concerned (2).

179 brand names containing a new active ingredient were marketed during the study period (7% of all pharmaceutical products released during the same period). The authors focused on two classes of drugs (antidepressants and macrolides) that were prescribed by sufficient numbers of physicians for meaningful analysis (\mathbf{b})(2). During the study period, 5 new macrolides and 6 new antidepressants were released onto the market (2).

The authors compared the total number of prescriptions per trimester with the manufacturers' total promotional budgets for the drugs concerned, and with their investment in sales forces. There was a strong correlation between the number of prescriptions per trimester and the relevant promotional budget, which was consistent across drugs. Each promotional campaign was associated with an increase in the number of prescriptions, which decreased during the interval between two campaigns (parallel saw-tooth curves) (2).

Relationship between advertising and sales figures

The IRDES survey confirms the global impact of promotional campaigns on prescriptions in France.

Another French survey, the subject of a medicine thesis, focused on antihypertensive drugs (3). The author compared the number of advertisements published in the French medical press between 1991 and 2001 with the corresponding sales figures for diuretics, angiotensin-converting-enzyme inhibitors, angiotensin II antagonists (sartans), etc. The correlation between the number of adsin professional journals and prescription volumes was particularly striking for certain drugs.

Between 1991 and 2001, among all advertisements for antihypertensive drugs, the proportion of ads promoting diuretics and ACE inhibitors fell respectively from 15.5% to 8.7% and from 43.3% to 23.6%. Between 1995 and 2001 the proportion of ads for angiotensin II antagonists (sartans) increased from 8.6% to 35.6% (3).

Trends in the sales of these three classes of drugs reflected the changes in advertising volumes: sales figures for diuretics stagnated (1016 million francs in 1991, 998 millions in 2001) and increased slightly for ACE inhibitors (from 2.3 to 2.7 billion francs), even though there was strong growth in the total market for antihypertensive drugs. In contrast, sales for angiotensin II antagonists jumped from 43 million francs in 1995 to 2.6 billion francs in 2001 (\mathbf{c})(3).

Advertising is effective

Sales reps' visits and ads in professional journals are not of course the only factors that determine how often a new drug is prescribed. They are nonetheless sufficiently influential to justify heavy investments in advertising. Drug companies and advertising agencies have conducted their own studies proving that their promotional campaigns are effective. One of these studies showed that ads were inherently profitable, with a return on investment of 2.39 dollars per dollar spent, and that they also augment the impact of other sales tactics (4).

In 2001, drug companies declared that they devoted 11% of their turnover in France to "information" and promotion (sales reps, samples, conferences, medical press, etc.),

corresponding to the astronomical sum of about 2.2 billion euros each year (5).

Drugs marketed for less than a year accounted for 32% of the global growth in the French pharmaceuticals market in 2003, compared to 21% in 2002 (**d**)(6).

These data will be of interest to all prescribers, especially those who claim to exercise free choice and to be immune to advertising. The French health authorities should also take note, as they are responsible for granting inordinately high prices for new drugs, thereby enabling drug companies to invest large sums in promotional campaigns. @Prescrire

c- This trend is not justified by clinical evidence on the effects of these newer antihypertensive drugs. In 2005, certain thiazide diuretics were still the antihypertensive drugs with the best risk-benefit balance (ref 8).

d-Notwithstanding differences in their assessments, Prescrire, the French Pharmacoeconomic Committee and the Swedish regulatory agency, for example, consider that only a small minority of recently marketed drugs represent tangible therapeutic advances (ref. 9, and this issue page 236).

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3- Charbit O "Influence de la publicité pharmaceutique sur la prescription" Thèse de doctorat en médecine générale. Université Paul Sabatier Toulouse III 2003: 136 pages.

4- AMP "The value of medical journal advertising". Website http://www.amponline.org searched on 18 August 2004.

5-LEEM "L'information médicale et la publicité" Website http://www.leem.org consulted on 18 August 2004.

6- Amar E "Les dépenses de médicaments remboursables en 2003" Direction de la recherche, des études, de l'évaluation et des statistiques *Études et Résultats* 2004; (324): 8 pages.

7-International Society of Drug Bulletins "ISDB Declaration on Therapeutic Advance in the Use of Medicines" available at: http://66.71.191.169/isdb web/pag/publications.php

8- Prescrire Rédaction "Hypertension artérielle de l'adulte" *Rev Prescrire* 2004; 24 (253):601-611+2005;
25 (257): II de couverture.

9- Prescrire Editorial Staff "Comparative advantage of new drugs: French authorities are not sufficiently demanding" *Prescrire Int* 2005; **4** (75): 75-79.

<sup>a- The authors of the IRDES survey defined "innovative" drugs as products containing at least one new active ingredient (ref 2). The International Society of Drug Bulletins considers that the word "innovation" can refer to three concepts: commercial (new products), technological, and therapeutic (advantage relative to existing treatments) (ref 7).
b- The following prescriptions were included in the study: antibiotic prescriptions by general practitioners, ENT and chest specialists to patients over 18 years of age; and antidepressant prescriptions by general practitioners and psychiatrists to the same age group (ref 2).</sup>

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¹⁻ Prescrire Rédaction "Consommation pharmaceutique en France et ailleurs" *Rev Prescrire* 1996; 16 (159): 165.

²⁻ Auvray L et al. "La diffusion de l'innovation pharmaceutique en médecine libérale: revue de la littérature et premiers résultats français" Centre de recherche, d'études et de documentation en économie de la santé *Questions d'économie de la santé* 2003; (73): 1-8.