DRUG ADVERTISING IN MEDICAL JOURNALS

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- 1 One hundred different drug advertisements from each of seven leading medical journals have been assessed.
- 2 Information about drug interactions, adverse reactions, mode of action, absorption, distribution, metabolism, excretion and cost was seldom provided in UK journals.
- 3 A requirement should exist that drug advertisements include such clinically important information. Only a few pharmaceutical companies are attempting to educate doctors through their marketing and promotional material in advertisements in medical journals.

Introduction

The general problem of drug-induced disease is well recognised although the awareness of individual doctors of clinically important information about drugs is often inadequate. Clinical pharmacologists have a responsibility to promote the dissemination of relevant information to the prescribers of drugs. Academic units have a part to play but the considerable influence of drug companies on the prescribing habits of doctors is undeniable (Wilson, Banks, Mapes & Korte, 1963). Drug data sheets have been introduced but are not an attractive or ideal vehicle for the effective transfer of important items of information. Direct mailing techniques, visits by sales representatives, free samples and advertising in medical journals all add to sales pressures. This paper describes a study of the commercial advertising of drugs in some widely distributed journals.

Methods

Seven journals (two American) were selected for scrutiny (Table 1). Three of them were weekly journals, two fortnightly and two monthly. One hundred different consecutive drug advertisements from each journal were analysed. Various items of information were collected from each advertisement (Tables 1, 2, 3 and Figure 1) and transferred to punch cards for analysis.

Results

Seven hundred advertisements were analysed.

The highest percentage of pages devoted to drug advertisements per journal was found in *World*

Medicine (52%) and *British Journal of Hospital Medicine* (38%), and the lowest percentage in the *Lancet* (14%). The two American journals had a higher percentage of advertisements which contained colour (over 85%) than the British journals (under 70%). The most common system for which drugs were advertised was the central nervous system followed by the cardiovascular and respiratory systems (Table 1).

Table 2 shows that approved names were not included in all advertisements. The pharmacological drug group was shown in less than half the advertisements. Cost was seldom mentioned (<7%). United Kingdom advertisements seldom mentioned contraindications, adverse effects, interactions and mode of action. Information about absorption, distribution, metabolism, excretion and mode of action was provided infrequently.

A summary of the principal references quoted is shown in Table 3. Over half the advertisements in the British journals and over two thirds of the advertisements in the American journals provided no sources for reference. The most commonly quoted sources in the British journals were the *British Medical Journal*, the *Lancet* and the *Practitioner*. In the American journals the most popular references were *Data in file*, *Journal of the American Medical Association* and *Annals of Internal Medicine*.

Figure 1 shows the median values for script, graphics and blank space found for each of the journals. It shows a tendency for more script and less blank space to be used in the American publications.

An attempt was made to classify the quality of

Figure 1 Script, graphics and blank space in journal advertisements—percentage estimation by decades e.g. 10-20%, 50-60%; median values of range in each journal.

the more purely promotional material in terms of 'blurb', meaning content that was merely sententious, suggestive, vacuous or bereft of information, and whether this element was exclusive or dominant, significant, minimal or absent. However, this was eventually abandoned because the judgments needed were mostly subjective, though some material is undeniably of this kind.

Discussion

This study attempts to analyse the advertisements of drugs in a number of arbitrarily selected leading medical journals. The findings confirm that in the United Kingdom many advertisements give very

Table 1 Information—100 different consecutive drug advertisements from each journal (mean values)

	<i>Br. med. J.</i>	<i>Lancet</i>	<i>World Medicine</i>	<i>Teach in</i>	<i>Br. J. hosp. Med.</i>	<i>J. Am. med. Ass.</i>	<i>Arch. int. med.</i>
Percentage of pages as drug advertisements	22	14	53	31	38	23	25
Systems advertised (%)							
Respiratory	26	12	18	18	7	12	11
Cardiovascular	16	24	9	9	21	19	25
Gastrointestinal	7	5	9	10	4	6	16
Central nervous	15	20	22	24	31	28	18
Genito-urinary	5	11	12	5	10	12	12
Endocrine	3	8	9	2	6	6	4
Skin	9	3	7	2	3	2	4
Multiple	2	2	1	3	1	1	4
Infections	6	9	4	11	9	8	4
Antirheumatic/arthritis	7	6	7	16	9	7	3
Other	5	1	2	1	1	0	1

Table 2 Type of information—100 different consecutive drug advertisements from each journal (mean values)

	<i>Br. med. J.</i>	<i>Lancet</i>	<i>World Medicine</i>	<i>Teach in</i>	<i>Br. J. hosp. Med.</i>	<i>J. Am. med. Ass.</i>	<i>Arch. int. Med.</i>
% advertisements mentioning:							
Approved name	99	99	98	99	97	100	99
Cost	3	2	2	—	7	3	—
Contraindications	9	8	3	3	4	79	76
Adverse effects:							
principal	6	6	3	3	5	6	7
full list	—	—	3	—	1	74	64
none mentioned	85	91	94	94	88	16	28
Interactions	—	—	2	—	—	66	58
Mode of action (pharmacological)	13	13	7	14	6	25	25
Absorption	3	4	—	4	3	6	5
Distribution	2	3	—	—	—	2	—
Metabolism	—	—	—	1	—	—	—
Excretion	1	2	—	—	1	3	3

little educational information (Stimson, 1975). The code of practice of the Association of the British Pharmaceutical Industry (ABPI, 1974) which was designed to secure high standards of conduct in the marketing of medical products is not being observed strictly by all pharmaceutical manufacturers.

Over 90% of all medicines are prescribed outside hospital and it is well documented that drug companies determine the relative concentration of advertisements by body system (e.g. central nervous system) according to the potential size of the market rather than by what might be desirable in an ideal therapeutic setting (Wilson, 1969; Stimson, 1975). The commercial success of a drug depends on the merits of the product but also on the manner in which it is marketed. An attempt to help the prescriber to use a drug in a rational manner by including a full account of pharmacological characteristics, adverse effects, drug interactions and cost does little to sell a drug in competition with a similar product advertised without all this information. Until a general policy for journal advertisements is imposed, or guide-

lines for advertisers are suggested such as those of the *British Journal of Clinical Pharmacology* (Editorial, 1974; Wade, 1974), this information will not be provided. Some drugs will continue to be advertised in a trivial and frivolous manner which does not do justice to the pharmaceutical industry or to the medical profession. The code of practice of the ABPI is a very welcome start but, unfortunately, not all manufacturers are accepting a responsibility to educate doctors in the rational use of their products. The emphasis remains on marketing the product.

Ideally, a self-regarding and wholly efficient profession would not need advertising, or be immune to it; though in present socio-economic conditions it is unrealistic to press this viewpoint. The admission that an improvement in the content of advertisements could go some way to bring about a reduction in disease due to drugs concedes that the prescribing habits of doctors are not adequately disciplined, as properly they ought to be, by good and continuing intra-professional education. Noteworthy attempts have been made in various publications, such as *Prescribers'*

Table 3 References—rank order and number of quotations (in brackets) from 100 different consecutive advertisements in different journals

	<i>Br. med. J.</i>	<i>Lancet</i>	<i>World Medicine</i>	<i>Teach in</i>	<i>Br. J. hosp. Med.</i>	<i>J. Am. med. Ass.</i>	<i>Arch. int. Med.</i>
Number mentioned (%)							
0	51	56	60	58	58	74	67
1–3	37	28	30	32	30	14	21
4–5	6	9	4	7	4	3	7
6+	6	7	6	3	8	9	5
Average number per advertisement	1.2	1.0	0.9	0.9	1.1	0.9	1.0
Sources:							
<i>Br. med. J.</i>	1 (20)	1 (20)	1 = (9)	1 (11)	1 (14)	—	—
<i>Lancet</i>	4	2 (6)	3 (7)	2 = (7)	3 (6)	—	8
<i>Practitioner</i>	2	5 = (4)	1 = (9)	2 = (7)	2 (8)	—	—
<i>In Press</i>	9	3 = (5)	6 =	—	—	—	—
<i>Data in file</i>	—	7 =	—	—	—	1 = (5)	1 = (10)
<i>J. Am. med. Ass.</i>	—	—	—	—	—	1 = (5)	2 (5)
<i>Ann. int. Med.</i>	—	—	—	—	—	3 =	4 =
<i>Clin. Pharmac. Ther.</i>	—	—	—	—	—	—	3 (4)
<i>Curr. Ther. Res.</i>	3 (6)	—	8 =	6 =	6 =	—	4 =
<i>Med. J. Austral.</i>	5 =	—	8 =	6 =	4 = (4)	—	—
<i>Symposia</i>	5 =	7 =	—	4 = (5)	—	8 =	—
<i>Postgrad. med. J.</i>	5 =	3 = (5)	—	6 =	—	3 =	—
<i>J. int. med. Res.</i>	9 =	—	4 = (5)	—	4 = (4)	—	—
<i>Br. J. clin. Pract.</i>	9 =	5 = (4)	8 =	4 = (5)	6 =	—	—
<i>J. clin. Invest.</i>	—	—	—	—	—	3 =	—
<i>Am. J. Cardiol.</i>	—	—	—	—	—	3 =	—
<i>Medical Digest</i>	—	7 =	8 =	—	6 =	—	—
<i>Curr. Med. Res. Opin.</i>	—	—	4 = (5)	—	6 =	—	—
<i>Excerpta Medica Foundation</i>	—	—	6 =	—	—	—	—
<i>Br. J. Psychiat.</i>	—	—	8 =	6 =	6 =	—	—

Journal, Drug and Therapeutics Bulletin, and *Clin-Alert (U.S.A.)* but the awareness of doctors of clinically important facts about drugs such as adverse interactions remains low (Petrie, Howie & Durno, 1974).

If every advertisement contained relevant clinically important information about precautions, contraindications, principal adverse effects and drug interactions, doctors (and the instructed patient) might benefit from an increased awareness and recognition of disease due to drugs. Specification of the pharmacological drug group to which the preparation (or combined preparation) belongs (e.g. phenothiazine; tricyclic; benzodiazepine) and the inclusion of at least two readily obtainable and reputable references could be of additional educational value. It is disappointing that over half the journal advertisements gave no references. Furthermore *Data in file*, *Unpublished* or quotations from a sponsored symposium were prominent and often unacceptable sources of reference. There is ample scope within the page area of present drug advertisements for additional educational material as much of the advertisement is devoted to graphic effects and blank space.

A policy for the content of journal advertisements must reflect a compromise between editorial policy, drug company and professional requirements and legislative controls. Many

journals are entirely dependent on advertising income and may not wish to discourage potential clients by making stringent demands for an improvement in the content of drug advertisements. On the other hand although this may be editorial policy it is of interest that the *British Journal of Clinical Pharmacology* contains few drug advertisements. A significant change in advertising policy by drug companies to alternative marketing methods, such as direct mailing or visits by representatives, would compromise the whole future of the journals or at least impair the basic educational content of their original articles and correspondence columns. Though the mutual obligations and indebtedness of industry and the profession are more subtle and arguable, most pharmaceutical companies must wish to provide a genuinely informative service about drugs to the profession in all their promotional materials.

A policy for drug advertisements in medical journals exists in America but some companies take 4-6 well-filled pages for an advertisement, and clinically important information may easily be overlooked by the prescribing physician in the flood of information. A modification of the American system, requiring the advertisements to contain at least the clinically important basic facts, such as specified above, is a necessity for the medical profession.

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