Table 1—Evaluation of information received for 44 pharmaceutical products

Heading*	No of products with information made available
International non-proprietary name	42
Pharmacological data:	
Pharmacological effects	10
Mechanism of action	35
Clinical information:	
Indications	42
Dosage regimen and relevant pharmacokinetic data†	19-35
Contraindications	26
Precautions and warning	31
Adverse effects	32
Drug interactions	24
Overdosage‡	11
Pharmaceutical information:	
How product can be given	39
Content quantity for each means of administration	38
Additives (sweeteners, flavourings, colourings)	0
Storage conditions and shelf life	11
Pack sizes	30
Description of product and package	29
Legal category	0
Name and address of manufacturer	40

*As suggested by World Health Organisation.¹

†Includes average dose and range, dosing interval, duration of treatment, and modifications as required.

‡Symptoms, treatment, and antidote.

desirable headings (table 1).¹ None of the replies mentioned the legal category or the additives (sweeteners, flavourings, and colourings) used in the product. Pharmacological actions and details of overdosage and storage conditions were missing for 33 products. Side effects, precautions, contraindications, and drug interactions were not described in 12-20 products. Non-proprietary names, mechanism of action, indications, average dose, dosage form and its content quantity, or manufacturer's name were not given for nine products.

Comment

We found that a request for further information was usually answered, albeit slowly, although some requests were never answered. This may reflect the lack of appropriate legislation. Advertisers use different phrases to offer further information, which might just be a difference in semantics but could be of great importance legally. A uniformly worded offer would therefore be desirable.

Companies were also clearly unsure about the form of further information. In fact, the helplessness of the medical executive of a company was obvious when he wrote: "We are not clear about the type of information you need...." Generally, the information supplied was either too little (therapeutic index), too much (booklets up to 34 pages long), irrelevant (newsletter), purely promotional (pamphlets), or difficult to read (package inserts). Even when information seemed to be in order it was presented so mechanically that it would fail to impress busy practitioners who are not trained to understand clinical pharmacology.

The basic information given to prescribers is generally poorly presented and difficult to use.² Several formats of drug information have been suggested and are in use.³ In our study we used a format suggested by the World Health Organisation,¹ and we find it to be reasonable. The desired information can be given in this format in an easily read printed document of four to five pages long. However, information can lead to the optimum use of a drug only if it is comparative for every point. This is essential in developing countries with few sources of drug information and many commercial pressures. Our results are likely to be similar in most developing countries. We would, however, be interested to see how matters differ in developed countries.

1 WHO Expert Committee. The use of essential drugs. *WHO Tech Rep Ser* 1992 No 825:18-9.

2 Herxheimer A. Basic information that prescribers are not getting about drugs. *Lancet* 1987;i:31-3.

3 Brown EG. Product information. In: Mann RD, Rawlins MD, Auty RM, eds. *A text book of pharmaceutical medicine: current practice*. New York: Parthenon Publishing Group, 1993:295-308.

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Hepatitis B and admission to medical school: an audit of British medical school policy

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See editorial
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In 1993 the health departments in the United Kingdom issued guidance on hepatitis B,¹ requiring all healthcare workers (including medical students) who perform exposure prone procedures to be vaccinated against hepatitis B and to have their serological response to the vaccine checked. Healthcare workers who perform invasive procedures and who do not respond to vaccination must be tested for hepatitis B carrier status. Those who are found to be positive for surface antigen without "e" markers (HBsAg positive) need not be excluded from any work. Workers who have "e" markers (HBeAg positive) should be excluded from invasive procedures.

In 1994 the Committee of Vice Chancellors and Principals agreed guidelines for universities on the fitness of students to practise medicine.² They recommended that "all successful applicants for entry into medical school should produce satisfactory evidence of non-infectivity and immunisation against hepatitis B by the time of registration as a medical student." The advice was expanded to say: "All applicants

should be screened for hepatitis B virus and antibody, and subsequently immunised if necessary, before entry to medical school."

These guidelines do not specify which tests should be performed or what antigenic status is incompatible with medical school entry.

Subjects, methods, and results

To ascertain how British medical schools interpreted the guidance, we sent a questionnaire to all 27 medical school deans in Britain in October 1995. The questionnaire asked what policy the medical school adopted for the 1995 student entry and the requirements of the policy.

Valid replies were received from 23 medical schools (85%). Two deans replied but declined to answer any of the questions, and no reply was received from two medical schools.

All respondents had a policy on hepatitis screening and vaccination for prospective students. Twelve medical schools expected students to have started a course of vaccination, but only four expected them to have completed the course by registration. A variety of hepatitis screening tests were sought (table 1), but only two medical schools adopted the conventional approach of looking for surface antigen and "e" markers only in students who fail to seroconvert after hepatitis B vaccine. Two medical schools are asking for tests for hepatitis C, ahead of anticipated guidance.

Table 1—Combinations of hepatitis B screening tests specifically requested by 23 medical schools in Britain before registering a new student

Tests	No (%) of medical schools
Hepatitis B surface antibody only	0
Hepatitis B surface antigen only	8 (35)
Hepatitis B anticore antibody only	2 (9)
Hepatitis B surface antigen and "e" markers	
Regardless of vaccination status	3 (13)
Only if antibody negative after vaccination	2 (9)
All of the above tests	3 (13)
No tests specified	5 (21)
Markers for infection with hepatitis C virus	2 (9)

Deans were asked: "Under what circumstances would you refuse a student, or remove one from your degree course?" Two medical schools seemed to confuse hepatitis B surface antibody and antigen, and would refuse a student who was antibody positive. Five medical schools are prepared to reject students who are positive for hepatitis B surface antigen, without consideration of "e" markers. Twelve schools would refuse or remove a student who was positive for "e" marker, two said they would not remove any students, and two did not answer the question.

Careers counselling of a hepatitis positive student would involve a specialist occupational physician in only 12 of the 23 medical schools and a virologist in six.

Comment

Testing prospective medical students for hepatitis B carrier status—particularly before entry and before the results of vaccination are known—has been criticised as an expensive exercise with limited benefit to patient care.^{3,4} There have been criticisms of the screening tests used.⁵

At the start of the 1995-6 academic year, British medical schools had interpreted the available guidelines in various ways. Policies may have changed in respect of the 1996 intake, but no clarification has been issued by the Committee of Vice Chancellors and Principals.

The setting of a consistent and achievable policy on the screening of medical and dental students before entry is vital to avoid inappropriate testing, inappropriate exclusion of potential students, and inconsistencies between medical schools.

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Conflict of interest: None.

1 UK Health Departments Advisory Group on Hepatitis. *Protecting health care workers and patients from hepatitis B*. London: HMSO, 1993.

2 Committee of Vice Chancellors and Principals of the Universities of the United Kingdom. *Fitness to practice medicine and dentistry in relation to hepatitis B*. London: CVCP, 1994.

3 Lever AM. Hepatitis B and medical student admission. *BMJ* 1994;308:870-1.

4 Poland GA. Vetting medical school applicants on basis of potential hepatitis B transmission. *Lancet* 1994;343:1162.

5 Gerlich W, Caspari G. Hepatitis B immunisation before entry into medical school. *Lancet* 1994;343:1572-3.

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On being wrong

In the mid-1950s probably all the students of my year found public health insufferably boring and irrelevant to proper medicine. This was certainly not the fault of the lecturer, a courteous gentleman of at least 55, who urged on us the importance of controlling infectious diseases, and the links between ill health and poverty. One summer afternoon he tried to arouse our interest in society's need to plan for the coming increase in the elderly population. "Shoot them," I muttered to my neighbour, and we grinned conspiratorially. Why couldn't we skip this rubbish, get out, and enjoy the sunshine, or at least learn about some important syndromes, the rarer and more bizarre the better.

Newly qualified, of course I knew more than the nurses about looking after patients. "He's had a head injury, staff nurse; he certainly does need observations every quarter of an hour." I knew more than my out of date seniors about scientific medicine and more about everything than most of the general practitioners, who thoughtlessly sent malingering patients to clutter up our casualty department. Surely only the less gifted among us would make a career of general practice. Good luck to them, looking after their neurotics and dreary whingers full of vague aches and pains. Being a specialist—preferably a world authority—that was the thing.

My young anaesthetist was a really smart person. He had found his niche, was competent, widely read, and always right. Things were so obvious: only anaesthetists had the training, the skill, and the ability to stay calm under stress to run intensive care units successfully.

Routine obstetric epidurals given by trainees would prove to be disastrous. Children should be heavily premedicated, and their parents were distracting intruders who must be kept out of the anaesthetic room. If the patient bled what he needed was blood; ether was too useful ever to be discarded.

Mature at 50, I could accept the importance, although not the name, of community medicine, and had many reasons to be grateful for the common sense and wise counsel of our family practitioner. After 21 years of anaesthesia I had learnt to be a little less dogmatic. Secure in my clinical and research experience, it was about this time that I sneered at the first description of a new device for airway control—a tube with a huge clumsy looking cuffed end, which was supposed to be shoved through the mouth and to sit on top of the larynx. Obviously it would cause laryngeal spasm, gagging, and obstruction due to misplacement.

Last year I retired from clinical medicine, reflecting that one of the privileges of my career had been to play a tiny part in the device's development. In my professional lifetime the single most important advance in anaesthesia has undoubtedly been the laryngeal mask.

In my seventh decade something else occurs to me. I do not particularly want to get shot.—A MARSHALL BARR is a retired anaesthetist in Reading

We welcome filler articles of up to 600 words on topics such as *A memorable patient*, *A paper that changed my practice*, *My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied with a disk.