THE USE OF PSYCHOTROPIC DRUGS: THE CLINICAL PHARMACOLOGIST'S VIEW

A. HERXHEIMER

London Hospital Medical College

I want to discuss some of the factors influencing the introduction of a drug and then to talk about factors influencing its subsequent use.

Social factors and the perceived unfilled needs of patients are only a small consideration in the introduction of new psychotropic drugs, as are the lack of efficacy and/or hazards of existing therapy. It is rare that new drugs afford significantly greater efficacy or safety. More often such differences are small and out of proportion to the work required to demonstrate them.

Clinical pharmacologists have most to contribute in the assessment of the potential advantage of a new product. Does it offer greater efficacy, fewer adverse effects, better patient acceptability or greater ease of use? Does it cost less? These can be decisive advantages which lead to the introduction of a product on medical grounds.

Unfortunately many factors affect the certainty or uncertainty of the answers to these questions. For example, how well has the drug been investigated? A drug may have big advantages, but have been poorly investigated so that the results are not very convincing. Thus investigation will embrace basic pharmacology, toxicology, clinical pharmacology and clinical trials. At each of these stages the possible advantages should be clearly demonstrated.

Commercial factors affecting the introduction of new drugs are less widely known outside the industry. When did the company last introduce a new product? Companies have to introduce new products to survive and to prosper. Employees would not otherwise have enough work to do. Companies have long-term plans which include decisions on entering the market in a new (for them) therapeutic area. They have to do the best they can to achieve these objectives. Market research forecasts are another feature affecting the introduction of a new drug. Has a niche been demonstrated? Will the product sell? In which niche can a claim be made?

Companies then consider patents. When a patent is about to expire, a company has to look for other sources of revenue. There may not be many good drugs on its horizon so it has to make do with what it has. Another factor affecting drug introductions is a company's image with its prescribers, its reputation. Well thought of companies have to maintain that standard. On the other hand they can use that

reputation to support a drug not so commendable on medical grounds. And companies do change their images from time to time. Another reason for introducing the drug is the work that has gone into it. Unfortunately a paucity of published data does not seem to deter new introductions.

There are some drugs which have been introduced a long time after they were discovered. Lithium was available first from a very small company long before it was formally marketed. It was shown to be an important drug. Lack of early recognition of this important product was probably due to its not being patentable. Another example was L-dopa. Fluphenazine in its long-acting form was a very important modification of the phenothiazines. Its indications were circumscribed which was an advantage in that its usage was simple.

The benzodiazepines are a successful group of drugs. Manufacturers have the problem of claiming something distinctive to say about the product. For example, there is a split between the hypnotic and anxiety-relieving properties of the benzodiazepines which is grossly exaggerated.

The company medical adviser is more aware of the medical factors and the medical background of any product with which he is associated than anyone else. He represents a medical viewpoint inside his company, although he is often outnumbered by other people. It would be helpful to get an independent outside opinion on potentially new drugs before deciding to market them.

It is interesting that one can distinguish between classes of drugs as whole entities—for example, the phenothiazines and the benzodiazepines. Their use is determined by collective medical experience. When choosing to use one member of a class as opposed to another, one is much more aware of the commercial considerations. Promotional activities therefore are highly important. The use of individual drugs in a class even by experts is very idiosyncratic.

Next we should consider the role of doctors participating in studies. Some trials are critical, rigorous and well designed. Others are large scale try-outs. Here, doctors are wooed or cajoled into participating in an apparently important role in a clinical study. But often the observations they are required to make are inadequate and the results hard or impossible to interpret. But the doctor involved in

such a study becomes familiar with the product and is then perhaps more likely to prescribe it. This happens extensively in general practice.

My final point is the ease of use of the drug. How much supervision does a patient taking a drug need? How often does he need to be seen? How long does he

need to be seen? Is it safe for a prescription to be renewed by the receptionist? Does the patient need to see the doctor each time?

We must not forget that the milieu in which the drug is prescribed is a most important factor in determining its effectiveness.

(This contribution has been transcribed by the editors from a tape-recording of the session)