



### Influences on clinical decision making

Drug prescription statistics across Europe show that there are vast differences in drug usage in dermatology from country to country. The diseases and the science of medicine are the same, but prescribing practice is hugely influenced by local custom and experience, habit and prejudices. There must be something wrong.

Clinical decision taking is very complex and a huge range of issues influence the clinician (Figure 1). But the foundation of high quality decision taking should be evidence based scientific information about the disease and its possible treatment.

Much of the management advice given in this book is not evidence based. Some may later be shown to be incorrect. Although the authors have tried to give evidence based information, this book gives their current opinions and some of their biases. So how could this be improved? How can clinical practice become based more on evidence and less on opinion?

### Guidelines

It is helpful to have the well thought out views of others available in an easily digested form to guide you over therapy. Until recently, guidelines in dermatology and across the rest of medicine were usually written by a small group of self-appointed 'experts' who reached a consensus in discussion, based on their current practice. The likelihood of bias or missing the results of recent research was obvious. Over the last decade there has been a revolution in guideline writing. The processes are now designed to be structured and open. There is a formal literature review and guidelines are based on all the available evidence. When published, the strength of evidence backing up each recommendation is given. There is an open process of wide consultation before final acceptance and publication, and a date for review is set, usually after 3 or 4 years.

If you read any guidelines, make sure that their production was rigorous and evidence based, such as the British Association of Dermatologists' (BAD) guidelines ([www.bad.org.uk](http://www.bad.org.uk)) or the European Dermatology Forum guidelines ([www.euroderm.org](http://www.euroderm.org)).

### Systematic reviews

A systematic review is a very detailed structured literature review that aims to answer a specific research or therapy question. By having clear criteria for papers that will or will not be included and by searching very widely for all possible papers, it is possible to be confident in the results of such reviews. The study results may be combined by a process of meta-analysis. The Cochrane Group, named after a Cardiff chest physician and epidemiologist, coordinates and publishes these reviews: the Cochrane Skin Group reviews are at <http://skin.cochrane.org>.

### UK Clinical Trials Network

If a drug really works dramatically then the numbers required to treat to prove effectiveness are very small. Only a handful of patients were needed to demonstrate that isotretinoin works in severe acne. But most advances in treatment are of smaller additional benefit and large double blind trials are essential.

The problem is that there are over 2000 different skin diseases: a dermatologist may only see some of these once every few years. It is impossible in a single centre to carry out prospective double blind trials on such uncommon conditions. It is also very costly. Many important clinical questions therefore remain unanswered.

So what can be done? The UK Dermatology Clinical Trials Network was set up by the Centre for Evidence Based Dermatology at Nottingham University, led by Professor Hywel Williams. The Network allows large numbers of dermatologists across the UK to contribute to high quality clinical studies of less common conditions to try to get some answers.

### Key points

- Clinical decisions should ideally be based on evidence.
- Systematic reviews identify current evidence and knowledge gaps.