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Alan Nathan, **Non-prescription Medicines (2nd Edition)**

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Reviewed by Professor J. A. Cantrill, Manchester, UK

Recent Government initiatives have been aimed at encouraging the public to take more responsibility for their own health, commonly referred to as 'self care'. In order to achieve this, it was recognised that an even wider range of safe and effective medicines needed to be made available to the public. One strategy, set out in the NHS Plan in the UK, has been to support a rise in the number of products deregulated from the prescription only category (POM) to pharmacy medicine status (P). Another recent initiative has seen the development of schemes which enable the public to access treatments for minor ailments directly from community pharmacies (paid for by the NHS) without the need to consult a doctor. Further, NHS Direct, the national nurse-led telephone helpline, will soon have the option to refer callers to community pharmacies. These developments clearly represent an expansion of the already established role of the community pharmacist in managing minor, self-limiting conditions.

Against this background, there is a clear need for up to date, accessible reference sources to support community pharmacists in a field with an expanding product range. In addition, prescribing rights are rapidly being extended to nurses, allowing them to prescribe both P and general sales list (GSL) products. Nurses have little experience of recommending or prescribing many of these products and will also need suitable reference sources to support their changing practice.

This book contains 39 chapters on a wide range of minor ailments, presented alphabetically, from acne to warts. The first edition was produced in 1998 and the second edition includes information on new products and deletion of those that have been discontinued. New approaches to treatment (e.g. head lice) have been included where appropriate and a new section on emergency hormonal contraception added.

The conditions reviewed are those which are most likely to present to a community pharmacist but will also frequently be seen by general practitioners (GPs) and nurses within primary care. Each chapter starts with a brief description of the condition and its causes with the majority of the information being about the products which are available over-the-counter (OTC) and their constituents. Information is provided on mode of action, side effects, cautions and contraindications, interactions, dosage ranges, formulations and details of many of the products available. Each chapter concludes with a summary of key points and succinct suggestions for product choice. Within each chapter, the author draws on the evidence for efficacy and safety where it is available. However, little detail of this evidence base is provided. In the introduction to the book he makes a clear statement about the paucity of evidence for OTC products, particularly the older ones. There is more evidence available relating to some of the more recently deregulated products.

The book would have benefited from both the inclusion of more detail about the studies that have been undertaken with these products and from the inclusion of all the primary references on which the author has based his conclusions. Increasingly, professionals are being challenged by both their peers and the public to produce this kind of evidence and I am sure that practitioners would appreciate having these data sources clearly referenced within this book. The author also points out to readers that although evidence of primary clinical benefit may be lacking, professionals should not ignore the potential secondary benefits associated with the use of OTC products. For example, although there is little direct evidence of the benefits of topical antiseptics or antibacterials in acne, he points out that positive effects may be derived from adopting a regular routine through which to manage the problem.

As it is likely that pharmacists will see an increasing number of patients with minor ailments, texts such as this would benefit from consideration of the differential diagnosis (where appropriate) and clear criteria for referral to another professional (usually, but not exclusively the GP). The suggested revisions for future editions could be accommodated within the existing length of the book by omitting the lists of products available. This information is of lesser importance and can be found in other reference sources.

In general, the book is well written and specific pieces of information are easily found. The start of each chapter clearly sets out the content and this is complemented by a good indexing system. While this book is clearly a valuable text for both practising professionals and students, there

are ways in which future editions could be revised to improve its value to a wide audience.

J. A. Cantrill is a Professor of Medicines, at the School of Pharmacy & Pharmaceutical Sciences, University of Manchester.

Gian Maria Pacifi and Olavi Pelkonen,
Interindividual Variability in Human Drug Metabolism

London: Taylor & Francis, 2001. 532 pages hardback.
£95
ISBN: 0-7484-0864-9

Reviewed by Dr David Lewis, Surrey, UK

Individual differences in the metabolic clearance of many clinically used drugs have been known for some time, but there has been a growing interest in this area over recent years. Consequently, this book is both timely and important for summarising the extent of scientific knowledge in this field which constitutes a major factor in human drug metabolism, namely, pharmacogenetics.

The editors are to be congratulated for assembling an impressive group of contributors to cover what is now regarded as a wide-ranging topic. The especial importance of the cytochrome P450 (CYP) superfamily of enzymes is highlighted in several chapters, but other drug-metabolizing enzymes where individual variation has been characterised are also covered satisfactorily.

In particular, the relevance of CYP2D6 and CYP2C19 allelic variants is emphasised by several authors in this volume. Furthermore, other drug-metabolising P450s such as CYP1A1, CYP1A2, CYP1B1, CYP2A6, CYP2B6, CYP2C8, CYP2C9, CYP2E1 and CYP3A4 are all mentioned in the context of interindividual variability in the clearance of several pharmaceutical classes, such as psychotropic and cardiovascular drugs, HIV protease inhibitors and anti-epileptic agents. However, an entire chapter is devoted to levodopa where a number of non-P450 enzymes are associated with its metabolism, such as monoamine oxidase (MAO) and aldehyde dehydrogenase. Consequently, individual variation in drug metabolism may be due to genetic defects in either the Phase I or Phase II enzymes, with P450 representing an example of the former and the transferases as typical examples of the latter.

The link between genetic polymorphisms in human ethnogeographical populations and specific point mutations in the relevant genes of the enzymes which mediate drug metabolism is emphasised in a number of chapters. For example, N-acetyltransferases, UDP-glucuronosyltransferases, methyl transferases, sulfotransferases and glutathione transferases are each given a chapter in recognition of their relevance to altered or impaired metabolism of drugs in human populations. However, the major importance of P450 is underscored in ten of the fifteen chapters, thus indicating the degree of relevance to drug metabolism and its defects which has been established for this enzyme superfamily.

Of special interest is a chapter on predictive modelling of drug interactions and the development of computer-based tools for extending in-vitro data to the in-vivo situation. The large number of informative tables and figures throughout the monograph is particularly helpful for assimilating the data presented, and for understanding the various concepts involved in pharmacogenetics and polymorphic drug metabolism in human individuals and their associated ethnic groups.

The variation of metabolic capacity with age is also covered in a short but well illustrated chapter on this highly relevant aspect of drug metabolism. Consequently, the editors have been able to provide a comprehensive and up-to-date multi-author text on this subject, which will prove extremely valuable to those engaged in research on human variability for metabolising drug substrates.

Dr David Lewis is currently Reader in Molecular Toxicology at the School of Biomedical and Life Sciences, University of Surrey. He has published many research papers and written two books in the field of cytochromes P450, and has a particular interest in molecular modelling of P450–substrate interactions.