Information Sources in the **Medical Sciences**

Third Edition

Editors L. T. Morton, FLA

S. Godbolt, BA, FLA

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Butterworths Guides to Information Sources

Information Sources in the **Medical Sciences**

Third Edition

A series under the General Editorship of D. J. Foskett, MA, FLA and M. W. Hill, MA, BSc, MRIC

This series was known previously as 'Information Sources for Research and Development'. Other titles available are:

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Series Editors' Foreword

Daniel Bell has made it clear in his book *The Post-Industrial Society* that we now live in an age in which information has succeeded raw materials and energy as the primary commodity. We have also seen in recent years the growth of a new discipline, information science. This is in spite of the fact that skill in acquiring and using information has always been one of the distinguishing features of the educated person. As Dr Johnson observed, 'Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it.'

But a new problem faces the modern educated person. We now have an excess of information, and even an excess of sources of information. This is often called the 'information explosion', though it might be more accurately called the 'publication explosion'. Yet it is of a deeper nature than either. The totality of knowledge itself, let alone of theories and opinions about knowledge, seems to have increased to an unbelievable extent, so that the pieces one seeks in order to solve any problem appear to be but a relatively few small straws in a very large haystack. That analogy, however, implies that we are indeed seeking but a few straws. In fact, when information arrives on our desks, we often find those few straws are actually far too big and far too numerous for one person to grasp and use easily. In the jargon used in the information world, efficient retrieval of relevant information often results in information overkill.

Ever since writing was invented, it has been a common practice

for men to record and store information; not only facts and figures. but also theories and opinions. The rate of recording accelerated after the invention of printing and moveable type, not because that in itself could increase the amount of recording but because, by making it easy to publish multiple copies of a document and sell them at a profit, recording and distributing information became very lucrative and hence attractive to more people. On the other hand, men and women in whose lives the discovery of the handling of information plays a large part usually devise ways of getting what they want from other people rather than from books in their efforts to avoid information overkill. Conferences, briefings, committee meetings are one means of this; personal contacts through the 'invisible college' and members of one's club are another. While such people do read, some of them voraciously, the reading of published literature, including in this category newspapers as well as books and journals and even watching television, may provide little more than 10% of the total information that they use.

Computers have increased the opportunities, not merely by acting as more efficient stores and providers of certain kinds of information than libraries, but also by manipulating the data they contain in order to synthesize new information. To give a simple illustration, a computer which holds data on commodity prices in the various trading capitals of the world, and also data on currency exchange rates, can be programmed to indicate comparative costs in different places in one single currency. Computerized data bases, i.e. stores of bibliographic information, are now well established and quite widely available for anyone to use. Also increasing are the number of data banks, i.e. stores of factual information, which are now generally accessible. Anyone who buys a suitable terminal may be able to arrange to draw information directly from these computer systems for their own purposes; the systems are normally linked to the subscriber by means of the telephone network. Equally, an alternative is now being provided by information supply services such as libraries, more and more of which are introducing terminals as part of their regular services.

The number of sources of information on any topic can therefore be very extensive indeed; publications (in the widest sense), people (experts), specialist organizations from research associations to chambers of commerce, and computer stores. The number of channels by which one can have access to these vast collections of information are also very numerous, ranging from professional literature searchers, via computer intermediaries, to Citizens' Advice Bureaux, information marketing services and information brokers.

The aim of the Butterworths Guides to Information Sources is to bring all these sources and channels together in a single convenient form and to present a picture of the international scene as it exists in each of the disciplines we plan to cover. Consideration is also being given to volumes that will cover major interdisciplinary areas of what are now sometimes called 'mission-oriented' fields of knowledge. The first stage of the whole project will give greater emphasis to publications and their exploitation, partly because they are so numerous, and partly because more detail is needed to guide them adequately. But it may be that in due course the balance will change, and certainly the balance in each volume will be that which is appropriate to its subject at the time.

The editor of each volume is a person of high standing, with substantial experience of the discipline and of the sources of information in it. With a team of authors of whom each one is a specialist in one aspect of the field, the total volume provides an integrated and highly expert account of the current sources, of all types, in its

subject.

D. J. Foskett Michael Hill

Preface to the third edition

Previous editions of this book were published under the title *Use* of *Medical Literature*. For this third edition the title has been changed to reflect the broader scope of the work. Each chapter has been revised to take account of important new publications and information services. Three additional chapters have been added, dealing with audio-visual materials, with the literature of general practice, and with information for patients and public. As the chapter on historical and biographical sources deals with medicine in general, chapters devoted to medical and surgical specialties include information on historical works.

We are indebted to the contributors whose excellent work ensured the success of the previous editions and who have so enthusiastically collaborated in the production of the present volume. We are most grateful to Miss Christine Gammon for expert clerical assistance. We would also like to thank the series editors (Mr Douglas Foskett and Mr Michael Hill), the editorial staff of Butterworths, and many of our library colleagues for their help and advice during the preparation of this edition.

L.T.M. S.G.

Preface to the first edition

This book attempts to provide a comprehensive guide to the general and specialist literature covering the medical sciences. It is intended for clinicians, medical scientists, librarians and information scientists; it should prove particularly useful to workers moving into a new and unfamiliar field of research. Besides describing published work within the subject field, it includes a chapter on mechanized information services and another on the organization of personal index files.

Limitations of space have not permitted a separate chapter for every branch of medicine but readers will find that several of the contributors have covered their subject very broadly. For example, Miss Read's chapter on Clinical Medicine deals with most of the clinical specialties and Dr Postlethwaite's contribution on Medical Microbiology includes such subjects as epidemiology, infectious disease, and some aspects of public health. Occasional overlapping is to be expected in a book for which most of the contributors have designed their chapters to be self-contained guides to their respective subjects.

It will be noticed that works quoted are predominantly in the English language, a reflection of the increasing international use of

English in the medical and scientific literature.

I am grateful to the contributors who have collaborated as a team to produce this book. It is hoped that the results of their labours will prove a worthy addition to the series on Information Sources for Research and Development. Thanks are due also to

the editors of the series, Dr Bottle and Mr Foskett, and to the publishers, Butterworths, for help and advice during the planning stages.

L.T.M.

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Libraries and their use

L. T. Morton and S. Godbolt

Today's doctor or medical scientist requires more information than ever before. Medical education and training have increased in complexity and are followed by specialization and possibly also research. The need for both the researcher and the practitioner to keep abreast of current developments necessitates using libraries and being conversant with the literature.

Despite upheavals and financial stringency the modern medical library, large or small, provides the key to a network of sophisticated and comprehensive services. The user may expect to find information in a variety of non-print formats, such as tape-slide and video. In larger libraries a terminal, through which many databases may be interrogated, is now essential equipment, and smaller libraries can provide advice on access and availability of computerized information retrieval services.

Microfiche library catalogues and the transformation of familiar reference tools such as British Books in Print (UK) or Books in Print (US) into microfiche as well as hard copy format necessitate machines for their use. This equipment is well designed and easy to use. Reader printers are likely to be available in these libraries, which may have journal runs as well as catalogues in microfiche form. Even the smallest library is likely to possess a photocopier and larger libraries may have two or more.

Use of the library is free to its membership but certain services, such as inter-library loans, online searching and photocopying may be charged for. However, hours of work in manual searching can