



Information
Sources for
Research and
Development

Use of Medical Literature

Edited by L.T. Morton

Use of Medical Literature

Editor

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Preface to the second edition

Since the first edition of this book appeared in 1974 there has been a considerable output of biomedical literature and significant progress in the development of mechanised sources of information retrieval. This second edition has been extensively revised and includes details of important new publications and information services.

The arrangement follows that of the first edition. A complete chapter on Paediatrics replaces the section in Chapter 14 of the first edition which dealt with that subject. As the chapter on historical and biographical sources deals with medicine in general, information on historical works has been added to the chapters devoted to the medical and surgical specialities. In a work of this nature, where most chapters are designed as self-contained guides, some overlapping is inevitable but in the second edition this has been minimised by the use of cross references. The index has been expanded.

I am indebted to the contributors, whose excellent work ensured the success of the first edition and who have so willingly collaborated in the production of the present volume. I am also grateful to the series editors, Dr R.T. Bottle and Mr Douglas Foscett, and to the editorial staff of Butterworths for their help and advice during its preparation.

L.T.M.

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 mechanised information services and another on the organisation 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

MEDICAL LIBRARIES IN GREAT BRITAIN AND IRELAND

Britain is well equipped with medical libraries. The royal colleges, the medical societies, and the teaching and research institutes have between them accumulated a rich storehouse of literature probably unsurpassed elsewhere. In recent years this has been considerably augmented by the British Library. A key to this storehouse is provided by the *Directory of Medical Libraries in the British Isles* (1976), which gives information on 402 libraries of various types and sizes.

London

The greatest concentration of libraries is in London. The largest medical libraries are those of the Royal Society of Medicine, the British Medical Association and the Wellcome Institute of the History of Medicine. The first two are private medical societies maintained by their members.

The Royal Society of Medicine was founded as the (Royal) Medical and Chirurgical Society in 1805. In 1907 it was combined with other medical societies (and their libraries) and assumed its present name. Today it has over 400 000 volumes and takes about 2200 current periodicals. The British Medical Association Library, founded in 1887, now has over 85 000 books and takes some 1500 current periodicals. Both libraries provide full reference and postal services for their members.

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One of the finest collections of medico-historical material in the world is that in the Wellcome Institute of the History of Medicine, London. This was founded through the generosity of Henry S. Wellcome and is available for reference purposes. It has over a quarter of a million volumes besides manuscripts, *incunabula*, autograph letters, etc. It frequently arranges exhibitions on medico-historical topics.

The formation of the British Postgraduate Medical Federation (University of London) in 1945 led to the establishment of a number of specialist postgraduate institutes. The Federation also incorporated two existing institutes – the Institute of Cancer Research and the (Royal) Postgraduate Medical School at Hammersmith Hospital (22 000 vols, 600 current periodicals). The latter has since become an independent school of the University. Both these establishments already had good libraries and the majority of the new institutes have since assembled sound specialised collections in the care of experienced librarians. They include the Cardiothoracic Institute (at the National Heart Hospital and Brompton Hospital), and the institutes of Child Health, Dental Surgery, Dermatology, Laryngology and Otology, Neurology, Obstetrics and Gynaecology, Ophthalmology, Orthopaedics, Psychiatry, and Urology. Another postgraduate school of the University of London is the London School of Hygiene and Tropical Medicine, which has 63 000 volumes and takes 1200 current journals.

There are twelve undergraduate medical schools in London. All have libraries, most of which cater both for the hospital medical staff and for the postgraduate research staff. Several of the librarians, like their provincial colleagues, give instruction in the use of medical libraries and the full exploitation of the literature, and by doing so make an important contribution to the early training of research workers.

The University of London, head of these undergraduate and postgraduate institutions, has itself built up a good collection of medical journals at Senate House. In the nearby Thane Library of Medical Sciences at University College, there is an important collection covering the basic medical sciences, with 42 000 volumes and 500 periodicals on anatomy, physiology, biochemistry, biophysics and pharmacology.

The royal colleges maintain valuable libraries. The Royal College of Physicians of London was founded in 1518. Most of its original library was lost in the Great Fire of 1666. Its present collection of over 40 000 volumes is rich in historical material. It also has a working collection of modern books and periodicals.

The Royal College of Surgeons of England (1800) has a fine specialist collection including 700 current journals and 150 000 books. The Royal College of Obstetricians and Gynaecologists, founded in 1929, is

developing a library of both historical and contemporary publications in its subject field. The much younger (1957) Royal College of General Practitioners has a valuable medical recordings service and maintains a bibliographical service on general practice publications. The Royal College of Pathologists is building up a historical library covering pathology, microbiology and related subjects.

The principal medical research institute in Britain is the Medical Research Council's National Institute for Medical Research (1913) at Mill Hill, London. Its library of 42 000 volumes and 700 current journals serves the scientific staff of the MRC at the Institute and elsewhere. The MRC also has small libraries in a number of its research units in various parts of the country. It has more recently established a Clinical Research Centre at Northwick Park Hospital, Harrow, which is equipped with a rapidly expanding library of clinical material, now containing 19 000 volumes and receiving 700 current journals.

Other research establishments, such as the Imperial Cancer Research Fund and the National Institute for Biological Standards, have good libraries, and many of the pharmaceutical houses maintain libraries of good standing.

The library of the Department of Health and Social Security was founded in 1834. It now takes 1000 journals and contains a total of 200 000 volumes. It is concerned with all aspects of public health and social welfare.

Under a scheme of specialisation operated by the public libraries of London, the Marylebone Road branch of Westminster City Libraries maintains a medical collection including a good selection of periodicals. This library is appropriately near Harley Street. London is also fortunate in having a subscription medical library, maintained by H. K. Lewis and Co Ltd, the medical publishers and booksellers. This has about 130 000 volumes, including multiple copies of most books. Printed catalogues of the library are available.

Besides the postgraduate institute libraries already mentioned, some other London libraries dealing with particular subjects are worth noting. The British Dental Association has the principal library covering this subject in the country. A smaller library is at the Royal Dental Hospital. The most important pharmaceutical library is that of the Pharmaceutical Society of Great Britain. The School of Pharmacy (University of London) has a good library in its field.

The British Council's Medical Library acts as a kind of foster parent to more than a hundred libraries throughout the world, supplying them with books, journals and other material concerning British medicine. The library also publishes *British Medicine*, a monthly guide to current

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British medical literature, which also includes details of new books, reports, forthcoming congresses of medical interest, etc., and lists the contents of current British medical periodicals.

Provinces

Good medical libraries are maintained in all the provincial medical schools. The need for continuing medical education has led in recent years to the establishment of a number of postgraduate medical centres. These are sited mainly in non-teaching hospitals in the provinces. Their aim is to provide a suitable adequately equipped location for the postgraduate teaching of hospital staff and general medical and dental practitioners, and at the same time to cater for consultants, junior hospital staff and general practitioners who wish to meet to discuss problems of common interest. The first purpose-built postgraduate medical centre was opened in 1963; the *Directory of Postgraduate Medical Centres 1977/78* shows that 300 centres had been established by 1975. All but a handful of these centres have only small libraries. Standards of library provision vary considerably; in some cases a regional organisation has been or is being developed, covering all libraries within the area administered by the Regional Health Authority and backed up by the university medical library.

Medical societies, too, have been active in the provinces, but most of their libraries have now been incorporated in local hospital or university libraries. An important exception is the library of the Liverpool Medical Institution, founded about 1773 and now containing more than 35 000 volumes and subscribing to 300 current journals.

Scotland

Edinburgh University has a modern medical library of about 50 000 volumes and notable medical collections are available in the other universities – Aberdeen, Dundee, Glasgow and St. Andrews. Strathclyde is building up a library covering the biological sciences.

The Royal College of Physicians of Edinburgh has a fine library of both historical and modern material amounting to more than 360 current periodicals and 200 000 volumes. The smaller, more specialised library at the Royal College of Surgeons of Edinburgh contains about 32 000 volumes. In Glasgow, the Royal College of Physicians and Surgeons has a good modern library supported by a rich historical collection, together totalling 150 000 volumes.

A subscription library similar to Lewis's Library but on a smaller scale, is maintained by Donald Ferrier Ltd of Edinburgh. This includes medicine, dentistry, veterinary medicine and science in its subject coverage, and contains about 30 000 volumes in all.

For further information on medical libraries in Scotland, see Bunch (1975).

Ireland

In Belfast the Queen's University Medical Library is housed in the Institute of Clinical Science. The Northern Ireland Health and Social Services Library was recently incorporated with it, and the medical library now provides a province-wide service for the social services teaching units, nursing schools, district hospital medical collections and postgraduate medical schools, besides catering for the needs of the medical staff and students of the University and members of the medical profession in Northern Ireland.

In Eire the Royal College of Surgeons in Ireland, University College Dublin (National University of Ireland) and the Irish Dental Library, all in Dublin, have notable collections.

National Libraries

The British Library was formed in 1973 by the amalgamation of several existing libraries, including the British Museum Library. Two sections are of particular usefulness in medicine and science — the British Library Lending Division and the Science Reference Library.

The British Library Lending Division, at Boston Spa, Yorkshire, is one of the best sources for modern medical and scientific literature in Britain. Its stock includes all significant serials in all subjects and languages (45 000 are currently received), all important English-language and foreign monographs, report literature and conference proceedings. It makes use of a number of 'back-up' libraries to obtain material not on its own shelves, as a result of which some major libraries not previously able to take much part in interlibrary lending can now make a useful contribution. It incorporates the National Central Library, which was the recognised national centre for the loan of books between libraries covering all subject fields, and which, besides its own large collection, could call on many general and special libraries both in Britain and abroad; it was, in fact, a clearing house through which it

was possible to borrow almost any book or journal. It built up union catalogues of the holdings of many of the outlier libraries it used.

The Science Reference Library was formed by expanding the former Patent Office Library with scientific literature from the British Museum and with newly acquired material. Natural science subjects, including a medical collection, are housed at Porchester Gardens, London W2. The remainder is in the old Patent Office Library, Chancery Lane, London WC2. Both sections will eventually be brought together to form the reference section of the British Library.

The professional organisation for medical libraries in Britain is the Medical Section of the Library Association. Its meetings include an annual week-end conference, usually in one of the large cities with well-established medical libraries. It is responsible for several publications and in other ways does its best to promote the interests of medical libraries and their users.

For language and other reasons British medical libraries have a close affinity with their American counterparts. Some of the areas of difference between American and British experience are skilfully defined by Gaskell (1970).

NORTH AMERICAN LIBRARIES

The United States has a wealth of medical libraries. The *Directory of Health Sciences Libraries in the United States 1973* (1974) lists nearly 3000 and gives details of stock, strength of personnel, etc.

The most important medical library in the world is the National Library of Medicine, at Bethesda, Maryland. Founded in 1836 as the Library of the Surgeon General's Office, US Army, it now possesses well over a million volumes and takes more than 10 000 current periodicals. It is rich in historical material; its catalogues of *incunabula* and early printed books and its other publications are described elsewhere in this volume. It is responsible for the compilation of the *Index Medicus* and its annual cumulation, the *Cumulated Index Medicus*, and for MEDLARS, perhaps the two most valuable contributions to medical information services in the world today. It has generously arranged the decentralisation of MEDLARS, which is now available in suitably equipped centres in and outside the USA. One of these is the British Library Lending Division. The National Library of Medicine also offers the usual reference and interlibrary loan facilities. Its functions and responsibilities are outlined by Scott Adams (1970).

The second largest American medical library is the Francis A. Countway Library at Harvard Medical School. This was formed by the

amalgamation in 1965 of Harvard Medical School Library (1783) with the Boston Medical Library (1807). This amalgamation resulted in a library of more than 600 000 volumes and 5000 current periodicals.

The library of the New York Academy of Medicine has an exhaustive collection of contemporary medical literature and is also richly endowed with historical material in all branches of medicine, together with collections of portraits, manuscripts, letters, medals, stamps, etc. It contains more than half a million volumes.

A fine example of interlibrary co-operation is the Medical Library Center of New York, incorporated in 1959 as a non-profit co-operative agency among health sciences libraries in metropolitan New York (see Meyerhoff, 1963). Funds from various sources were made available and premises for the Centre were acquired at East 102 Street. Among the original members were the health sciences libraries of Cornell University, Columbia University, Memorial Sloan-Kettering Cancer Center, Rockefeller Institute, New York Medical College, Albert Einstein College of Medicine, and the New York Academy of Medicine. Membership in 1976 was 39, including other medical schools, hospitals and a pharmaceutical company within the Greater Metropolitan New York Area.

The purposes of the Center are to provide additional stack facilities and storage, to maintain a union list of current medical periodicals, to develop uniform systems of cataloguing, to facilitate the acquisition and sharing of medical books and periodicals and medical library equipment, and to provide facilities for research and experiment in the fields of medical library practice and administration. In addition, less-used currently published serials not received by the participating libraries are acquired. Its activities are supported by membership fees. Members and non-members participating in special programmes are assessed fees for those services. Two such programmes are an automated system of serials control and a shared cataloguing system using the Ohio College Library Center system. The biomedical periodicals data base developed at the Medical Library Center is used in assisting other libraries to produce local or regional union lists. The 1976 edition of the *Union Catalog of Medical Periodicals* includes 31 209 periodicals and serial titles. The UCMP/Quarterly (microfiche format) contains full bibliographical entry for 50 000 serials and periodicals with the detailed holdings of over 100 libraries in the area. It is updated quarterly.

Other important American collections that may be mentioned here are those of the College of Physicians of Philadelphia; Yale Medical Library; the Mayo Clinic; Johns Hopkins School of Medicine; the State University of New York Downstate Medical Center; the Biomedical Library at the Center for the Health Sciences, University of California

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at Los Angeles; the National Institutes of Health at Bethesda, Md; Cleveland Health Sciences Library; and the medical section of the John Crerar Library, Chicago. A short well-documented account of medical libraries in the USA forms part of Thornton's (1966) survey of medical libraries of the world.

The professional organisation for medical librarians in the USA is the Medical Library Association, founded in 1898. Its objectives are to foster medical libraries, to encourage the training and continuing education of medical librarians, and to operate an exchange of duplicate material. It is responsible for a number of important publications, including the quarterly *Bulletin of the Medical Library Association*, the most important serial publication in the field; *Medical Reference Works 1679-1966: a Selected Bibliography*, by J. B. Blake and C. Roos, 1967, with several supplements; and the *Handbook of Medical Library Practice*, 3rd edn, 1970, edited by Gertrude L. Annan and Jacqueline W. Felter. It holds an annual meeting for the presentation of papers and the discussion of its organisational affairs.

Canada's principal medical libraries are at the Academy of Medicine, Toronto; McGill Medical Library, Montreal; the Department of National Health and Welfare, Ottawa; the W. K. Kellogg Health Sciences Library at Dalhousie University, Halifax; the Health Sciences Centre Library at London, Ontario; and the McMaster University Health Sciences Library at Hamilton, Ontario.

OTHER LIBRARIES

In France the Institut National de la Santé et de la Recherche Médicale (INSERM) plays an important part in the provision of biomedical documentation. It is responsible for operating the MEDLARS service in France. Mention should be made of the collections of the Bibliothèque de la Faculté de Médecine de Paris and the Académie de Médecine, Paris.

Although German libraries suffered considerably during the war, large medical libraries are established at Heidelberg, Göttingen, Munich and Cologne. The Deutsches Institut für Medizinische Dokumentation (DIMDI) operates a MEDLARS service at Cologne.

Switzerland is fortunate in being the home of the World Health Organization, in which the need for an adequate library and reference service to support the technical work of WHO has been recognised since its foundation. The first books and periodicals were acquired in 1946, since when the collection has grown steadily. The WHO library in Geneva now contains over 100 000 volumes, having inherited at an