

ACCESS TO BIOMEDICAL INFORMATION FROM THE EAST IN THE U.S. NATIONAL LIBRARY OF MEDICINE'S DATABASES

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The preservation of the health and the prevention or cure of disease is a world-wide concern. Health professionals and researchers throughout the world should have access to the research findings, information about the occurrence and control of disease, and the delivery of health care in every country. In order to obtain this information it is essential that the publications containing such information be readily accessible. This requires bibliographic information about the publications and their contents, a method to acquire them, and a process to obtain the information in response to a need. It is the role of health sciences librarians to help researchers and health professionals to obtain this information. It is also the role of health sciences librarians in each country to ensure the systems whereby health professionals and researchers in other parts of the world may gain access to the information published in their country. The National Library of Medicine (NLM) is the world's largest medical research library with more than 5,1 million items in over 70 languages. There are over 665,000 monographs and 74,000 serial titles in the collection, from the eleventh century to date. NLM attempts to select, acquire, preserve, and provide access to a comprehensive collection of the scholarly biomedical literature from all over the world. A comprehensive collection is one in which the library endeavors to include all significant works of recorded knowledge in all applicable languages, for a necessarily defined and limited field. Biomedical is defined as pertaining to health care, to the practice of the science and art of medicine broadly conceived, and to those branches of the life sciences which are fundamental to that science and art. Scholarly is defined as resulting from professional study or research. The intent is to ensure that the collection represents the intellectual content and diversity of the world's biomedical literature, although it cannot collect all that is published in biomedicine, even all that is published in the United States. Access to the NLM collection is provided through bibliographic databases, CATLINE for monographs and SERLINE for serials. Access to the information content of the articles in journals is provided through the MEDLINE database.

Important biomedical literature is published in Asia. This purpose of this paper is to review the number of records in the National Library of Medicine's databases for literature published in a few Asian countries. The first section is an overview of the amount of biomedical literature in the collection from four Asian countries. The second section will focus on the journal titles currently published in China, indicating the percentage acquired by NLM and the percent indexed in MEDLINE. The third and final section will contain some observations and recommendations arising from this study.

Section 1 - Overview

The following table shows the number of monograph and journal titles in the NLM collection from China, Japan, Korea, and Taiwan for which there are bibliographic records in CATLINE.

Country	Monographs	Journal Titles	Current Journal Titles
China	8,183	697	422
Japan	21,831	3,397	1,584
Korea	1,252	377	288
Taiwan	385	130	58

Recently a member of the staff reviewed the Japanese acquisitions and was pleasantly surprised to find that 1,476 of the current serials are published in Japan; the Japanese serial collection is the fourth largest, ranking after the U.S. (5,203), the United Kingdom (1,607), and Germany (1,448).

Section 2 - Collection of journal titles published in China

In order to assess the Library's collection it is necessary to determine the number of scholarly biomedical journals published in China. This proved to be a difficult task, especially for someone who is unfamiliar with the Chinese language. Unfortunately, the commercial dealers indicated that they knew of no list that would provide an accurate listing in English of the current journals published in China. The Institute of Medical Informatics at the Chinese Academy of Medical Sciences indicated that about 800 biomedical titles are published in China; they plan to index 600 of these. It was obtained a list of 165 titles (LIST 1) which the Center thought were the most important for NLM to index. Dr. Dizhi Xiong provided a list of 109 titles (LIST 2) which are published by the Chinese Medical Association and the national medical universities. A third list of 174 titles was obtained from the China International Book Trading Corporation. These three lists along with titles acquired for the NLM collection were used to develop a list

of 459 biomedical journals currently published in China. Titles were matched by ISSN numbers to avoid duplicate entries caused by discrepancies in the formation of the English title or the transliteration differences.

The National Library of Medicine currently subscribes to or has on order 352 (76,7%) of the 459 biomedical journal titles identified in this study. The following table indicates the number and percent of known biomedical journal titles published in China acquired by the Library.

NLM	LIST 1	LIST 2	LIST 3	NO LIST
Acquired	109 (96%)	90 (83%)	109 (62%)	169 (91%)
Not acquired	5 (4%)	19 (17%)	67 (38%)	17 (9%)
TOTAL	114	109	176	186

The next table shows the percentage of these titles which are indexed for MEDLINE.

NLM	LIST 1	LIST 2	LIST 3	NO LIST	TOTAL
Indexed	24 (21%)	25 (23%)	23 (13%)	15 (8%)	47 (10%)
Not indexed	90 (79%)	84 (77%)	153 (87%)	171 (92%)	412 (90%)

The Literature Selection Technical Review Committee is the committee chartered by the National Institutes of Health to advise the Library on which titles to index. The committee reviews each biomedical titles published in the world and scores each on a scale of 0 to 5, with 5 being the highest. A score of 4 or higher is needed for a title to be selected for indexing. Since 1988 eighty-four journal titles published in China have been reviewed by the Literature Selection Technical Review Committee; eighteen (21%) of the titles have received scores of 4 or higher. Overall, only 21% of all titles reviewed receive a score of 4 or greater.

Section 3 - Observations and Recommendations

After reviewing the bibliographic records for the journal titles and the coverage in the Library's collection there are some important observations:

1. The National Library of Medicine's bibliographic records for these titles are often incomplete missing the date when the title began publishing and information about title changes or interruptions in the publication schedule.

2. There are many gaps in holdings. A health professional in the United States cannot be assured of finding the specific issue of a Chinese title in the Library despite the fact that NLM has ordered and presumably acquired the title.
3. Based on the SERLINE records, with the exception of a small number of titles, NLM is the only biomedical library in the U.S. reporting the acquisition of these journals.
4. A little over one fifth (21,5%) of the titles in this study had no ISSN. In a number of cases there was no ISSN printed on the actual journal issues. The absence of an ISSN presents problems for serials librarians since many use this number to control their serial subscriptions. This is especially important where the language of publication must be transliterated for use in most libraries outside of Asia and the transliteration schemes vary. Without an ISSN it is difficult to distinguish reliably between titles.

These observations lead me to make following recommendations:

1. Publishers of biomedical journals and other serials in China are urged to ensure that they obtain an ISSN for each title they publish and publish the ISSN in Arabic numerals prominently on each issue.
2. NLM needs to develop a working relationship with an organization in China which will assist the NLM in obtaining and correcting the bibliographic data for journal titles published in China, ensuring that the data is updated regularly for title changes, new titles, and titles which cease publication.
3. It seems important to develop a Chinese equivalent to MEDLINE to provide international access to the content of articles in more journals published in China. NLM will continue to review and select those titles its advisors believe are of the highest quality and of the most importance to the international audience for indexing in MEDLINE. Many more journals are published in China and many should be indexed. I believe that there are plans to do this in Chinese. This project should be supported. It is also important that such a database be made available in English so the international audience can access the scholarly record published in China. In addition, to make this database useful outside of China, English language abstracts for each article should be included.
4. It is important that copies of issues of Chinese journals be available for consultation outside China. Although efficient document delivery systems can be established between libraries in China and those in other countries and perhaps more titles will be available electronically, the contents of libraries

have been periodically destroyed over the centuries through wide-scale natural disasters. Thus it is important that the informational content be preserved in more than one location.

In this paper I have tried to examine the availability of the current scholarly record of biomedicine from China in the National Library of Medicine and to point out some of the observations I made in accumulating the data for this study. It is important that access to the information in this literature be improved for there is much to be learned from the research and clinical literature from this vast, important country. Implementing the recommendations in this paper would help ensure access to China's biomedical scholarly record for scholars throughout the world now and for centuries to come.

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