

# HOSPITAL LIBRARY INFORMATION SERVICES FOR SCIENTIFIC RESEARCH DECISION SUPPORT

Xiangtong Kong\*, Yujie Xin, Chunyan Li, Chenghui Gao, Deyang Zhang, Xipeng Xu, Guanyu Kong  
*Qufu Fareast Vocational and Technical College.*  
Corresponding Author: Xiangtong Kong, Email: [kxt\\_1231@163.com](mailto:kxt_1231@163.com)

**Abstract:** With the rapid development of medical technology, hospital libraries, as important bases for medical research, undertake the important task of providing information support for scientific research decision-making. This article aims to explore how hospital libraries can provide efficient information services for scientific research decision-making, in order to promote the development of medical research. The article analyzes the current situation and existing problems of information services in hospital libraries, and proposes corresponding solutions. With the development of technology and the progress of medical and health care, various medical information is constantly updated, and massive data needs to be identified, analyzed, and stored. Currently, hospital libraries have become an indispensable part of medical and health information construction. This article also explores the content, methods, and strategies of hospital library information services for scientific research decision support, based on actual situations, mainly including basic information services, literature retrieval and transmission services, scientific research consulting and training services, and knowledge management and information service platforms. At the same time, through case analysis and evaluation of hospital library information services, the advantages and disadvantages of hospital library information services were summarized, and suggestions for further improving services were proposed.

**Keywords:** Hospital library; Scientific research decision-making; Intelligence services; Information services; Strategy

## 1. INTRODUCTION

Hospital libraries are important places for medical researchers to acquire knowledge and exchange information. With the rapid development of medical technology, the role of information services in hospital libraries in medical research decision-making is becoming increasingly prominent. However, there are still certain problems in the current information services of hospital libraries, such as single service content and insufficient information analysis capabilities. This article aims to explore how to improve the quality and level of information services for scientific research decision-making in hospital libraries.

With the continuous updates of medical technology and the rapid development of healthcare, more and more medical information needs to be identified, analyzed, and stored. As an indispensable part of the construction of medical and health information technology, hospital libraries play an important role in providing information services, providing rich information resources and knowledge support for medical personnel, and playing an irreplaceable role in promoting hospital management, clinical decision-making, and scientific research progress[1]. On the basis of analyzing the content, methods, and strategies of information services for scientific research decision support in hospital libraries, this paper summarizes the advantages and disadvantages of hospital library information services through the analysis and evaluation of service cases, and puts forward suggestions for further improving the services.

## 2. THE CONTENT OF INFORMATION SERVICES IN HOSPITAL LIBRARIES

The information services of hospital libraries mainly cover the following four aspects:

### 2.1 Basic Data Services

Basic data service is the foundation and starting point of hospital library information service, which includes the collection, organization, and database construction of basic data for both internal and external parts of the hospital. Hospital libraries should continuously update and improve their basic databases, including medical databases, reference

books, professional journals, and other resources, to ensure the timeliness, accuracy, authority, and scientificity of information[2].

## **2.2 Literature Retrieval and Delivery Services**

Literature retrieval and delivery services are one of the core and key aspects of information services in hospital libraries. Hospital libraries should establish a comprehensive literature retrieval system, including relevant domestic and foreign literature in the search scope, and provide professional literature retrieval technical support for medical personnel to help users quickly and efficiently obtain the latest, most comprehensive, and most accurate medical information. At the same time, hospital libraries also need to establish effective channels for document delivery, develop and utilize various methods of document delivery, such as postal, mail, and document delivery systems, to ensure the smooth progress of medical research and clinical decision-making[3].

## **2.3 Research Consulting and Training Services**

Research consulting and training services are an important component of hospital library information services. Hospital libraries should train and proficiently use medical literature retrieval databases and knowledge management tools, provide professional research support and services for medical personnel, and promote the improvement of medical research level. In addition, hospital libraries should also organize various forms of academic seminars, training courses, and technological exchange activities, strengthen cooperation and contact with medical institutions and academic organizations at all levels at home and abroad.

## **2.4 Knowledge Management and Information Service Platform**

The knowledge management and information service platform is an advanced form and development trend of hospital library intelligence services. With the continuous improvement of informatization, hospital libraries need to establish a knowledge management system based on information service platforms, use advanced IT technology and information management systems, integrate medical informatization processing, knowledge field research, and application services, and form an intelligent service platform with medical information as the core[4].

Medical literature retrieval services provide various literature retrieval services in the medical field, including electronic libraries, library medical literature transmission services, hospital intelligence research services, and comprehensive information services. They provide information services for the development and decision-making of hospitals, including electronic resource training and guidance for readers, information education services, intelligence analysis services, and targeted intelligence analysis reports.

# **3. ANALYSIS OF THE CURRENT SITUATION AND PROBLEMS OF INFORMATION SERVICES IN HOSPITAL LIBRARIES**

## **3.1 Single Service Content**

At present, the information services of hospital libraries mainly focus on literature search, information provision, and other aspects, with relatively single service content. This service model is difficult to meet the diversified needs of scientific researchers in project application, research design, and achievement promotion.

## **3.2 Insufficient Intelligence Analysis Capability**

Hospital library intelligence services have certain capabilities in information collection and organization, but there are shortcomings in intelligence analysis. What researchers need is intelligence that has been deeply analyzed and refined, rather than a simple accumulation of information.

# **4. INTELLIGENCE SERVICE STRATEGIES FOR SCIENTIFIC RESEARCH DECISION-MAKING IN HOSPITAL LIBRARIES**

#### **4.1 Expanding Service Content**

Hospital libraries should expand their service offerings and provide one-stop intelligence services from project application, research design, and achievement promotion. For example, adding services such as project application guidance, research progress tracking, and achievement evaluation.

#### **4.2 Enhancing Intelligence Analysis Capabilities**

Hospital libraries should strengthen training on intelligence analysis methods and enhance their intelligence analysis capabilities. At the same time, by collaborating with professional intelligence agencies and research teams, advanced intelligence analysis technologies and service models are introduced.

#### **4.3 Strengthening Information Construction**

Hospital libraries should strengthen information technology construction and improve the efficiency and quality of information services. For example, building a scientific research information platform to achieve the sharing of intelligence resources; Utilize technologies such as big data and artificial intelligence to enhance information retrieval and analysis capabilities[5].

#### **4.4 Cultivating Professional Talents**

Hospital libraries should attach importance to talent cultivation and improve the professional quality of librarians. Enhance the abilities of librarians in intelligence collection, analysis, dissemination, and other aspects through regular training, business communication, and other means.

#### **4.5. Strengthen Business Research and Demand Analysis**

When providing intelligence services, hospital libraries need to conduct business research and demand analysis based on user needs and actual situations, understand the information resources inside and outside the hospital and the knowledge needs of medical personnel, and then design and optimize the content and form of intelligence services to better meet the actual needs of users.

#### **4.6. Strengthen the Integration and Sharing of Information Resources**

Hospital libraries should strengthen the integration, sharing, and utilization of medical information resources, establish research databases and literature retrieval systems, and promote data sharing and information exchange. In addition, hospital libraries should actively participate in national or international digital medical literature sharing programs to contribute to the development of the healthcare information environment.

#### **4.7. Strengthen Service Quality Control**

When providing intelligence services, hospital libraries need to establish a sound service quality management system, formulate service standards and quality inspection standards, supervise and evaluate the service process, and ensure service quality and effectiveness. In addition, hospital libraries should establish a user complaint mechanism to promptly accept user complaints, solve problems, and improve services[6].

### **5. THE SIGNIFICANCE OF INFORMATION SERVICES IN HOSPITAL LIBRARIES**

The hospital library is an important department for collecting, storing, and providing knowledge and information in various aspects of medical teaching and research in hospitals. Whether it can fully play its role in medical, teaching, and research activities, and solve practical problems, largely depends on the development of bibliographic information. The quality of this service is one of the important indicators for measuring the quality of service to readers, and it is important to meet the needs of hospital medical care, teaching, and research. The information needs of teaching and research work are of great significance.

### **5.1. Provide rich Information Resources**

The hospital library has abundant medical literature resources, including journal papers, conference papers, monographs, patents, etc., providing comprehensive academic materials and research results for researchers. These resources not only help researchers understand cutting-edge developments in the field, but also provide strong support for their research.

### **5.2. Provide Professional Intelligence Analysis Services**

Hospital library information service personnel possess professional medical knowledge and intelligence analysis skills, and can provide professional intelligence analysis services for scientific researchers. They can help researchers screen out valuable information, uncover potential research directions and trends, and provide strong support for scientific decision-making.

### **5.3. Promoting Academic Exchange and Cooperation**

The hospital library not only provides abundant information resources, but also provides a platform for academic exchange and cooperation for researchers. Through academic activities and seminars in the library, researchers can communicate and collaborate with other peers to jointly promote the development of the medical field[7].

## **6. CASE ANALYSIS AND EVALUATION**

The information services of hospital libraries have played an important role in practice. For example, the Cancer Hospital Library of the Chinese Academy of Medical Sciences provides various information services such as scientific research consultation, knowledge services, and literature retrieval through regular lectures, graduate courses, and academic forums. It also establishes a complete electronic library, journal library, and literature transmission channel, Provided solid support for scientific research decision-making and clinical practice in hospitals.

However, there are still some shortcomings at present, such as the lack of sufficient user participation and feedback in the intelligence service process of hospital libraries; The construction of service resources in some hospital libraries is not perfect enough; Some hospital libraries have not yet introduced advanced IT technology, making it difficult to update and optimize service content in a timely manner.

In summary, in response to the above shortcomings, it is recommended that hospital libraries should strengthen user service awareness and participation, improve service quality and effectiveness; Improve the medical information resource library, expand service fields and forms, enhance service level and competitiveness; Introduce and utilize advanced IT technology to accelerate the process and development of informatization, and build an intelligent service system.

## **7. CHALLENGES AND FUTURE DEVELOPMENT TRENDS OF INFORMATION SERVICES IN HOSPITAL LIBRARIES**

### **7.1 Challenge**

(1) The rapid growth and updating speed of information resources have brought enormous challenges to the intelligence services of hospital libraries. How to quickly and accurately obtain and organize the latest medical literature resources is an important issue faced by hospital library information services.

With the continuous development and progress of medical technology, researchers

Mobile Library Function Framework Diagram Login Method ∈ Number Information Paper/Electricity (Web Page Browsing, Library Research Users, Resource Inspection Touch Screen, Mobile App) Users, Leakage Users Quality Resource Information Paper Resource Quality Contract, Reminder, Sub subject Navigation (Journals, Books, etc.) Continued Electronic Resource Reading Offline Electronic Resources Mobile AF Offline Me E (Courseware, Videos, etc.) (Preferred Topic Consultation Mobile AP Consulting Lake Discipline Services (Preferred Book Mobile Services Building User Archives Scientific Research Projects Archives Service Professional Course Archives Lecture Letters Social Hotspots Other New Networks On Campus New Networks New Resources Dynamic and Discussion Column

## 7.2. Future Development Trends

(1) Personalized services: With the continuous development and progress of the medical field, the demand for intelligence services by researchers is also constantly increasing. In the future, hospital library information services will pay more attention to the development of personalized services, providing customized information analysis reports and services based on the actual needs of scientific researchers.

(2) Application of intelligent technology: With the development and application of information technology, intelligent technology will become an important direction for the development of hospital library information services. In the future, hospital libraries will pay more attention to the application of intelligent technologies, such as natural language processing technology, data mining technology, etc., to improve the accuracy and efficiency of intelligence services.

(3) Diversified development: In the future, hospital library information services will pay more attention to diversified development, including the diversification of service content and service methods. For example, in addition to traditional literature search and delivery services, online consultation, special lectures, and other services can also be provided; At the same time, services can also be provided in various ways, such as a combination of online and offline methods.

## 8. CONCLUSION

The information service of hospital libraries for scientific research decision-making is a key factor in the development of medical research. This article analyzes the current situation and existing problems of information services in hospital libraries, and proposes strategies to expand service content, enhance information analysis capabilities, strengthen information construction, and cultivate professional talents. Only by continuously improving the quality of information services in hospital libraries can we provide strong support for scientific research decision-making and promote the development of medical research. The intelligence service of hospital libraries is an important component of medical and health information construction, and should focus on strengthening basic data services, literature retrieval and transmission services, scientific research consulting and training services, as well as knowledge management and information service platform construction. In practice, hospital library information services have achieved certain results, but there are still some urgent problems and challenges that need to be solved. It is necessary to continuously strengthen service quality control and technological innovation, further improve the information service system, and promote the development and progress of the medical and health industry.

## COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

## REFERENCES

- [1] Dong Li. Analysis of the research progress on the service model of medical libraries in mainland China in 2018. *Jintu Academic Journal*, 2020 (03).
- [2] Guofeng Zhang. Practical exploration of the transformation and development of hospital libraries under the background of evidence-based medicine. *Medical Information*, 2020 (10).
- [3] Yankun Shao, Zonghua Xiao, Mei Li. A survey and study on the disciplinary service strategies of medical university libraries. *Journal of Medical Informatics*, 2019 (12).
- [4] Ling Chen, Hongwei Zhang; Lin Zhang; Chunmei Wang. The evolution of service concepts in medical libraries in China in recent years. *Journal of Medical Informatics*, 2019 (09).
- [5] Ling Li. Exploration of medical library think tank service model based on user profile. *Chinese Journal of Medical Library and Information Science*, 2019 (07).
- [6] Oriole. Reflection on the Transformation of Medical Libraries from the Perspective of Smart Libraries. *Journal of Medical Informatics*, 2019 (04).

- [7] Shanshan Hu, Kaijun Yu, Ruiyi Gong, Dandan Qian. Probe into Service Function of Think Tanks in Medical University Library in the View of New Think-tank Construction. 2019, (02): 95-100+120. DOI: 10.16384/j.cnki.lwas.2019.02.014.