

## **Advancement for Research in Health Sciences**

By

Dr. Kiran R.

Chief Librarian

Hospital Rajarajeswari Medical College & Hospital

Kambipura, Mysore Road,

Bangalore -560 074. E-Mail: kiranr123@gmail.com

Dr. Umesha

Chief Librarian

Kempegowda Institute of Medical Sciences,

BSK 2nd Stage,

Bangalore -560 010. E-Mail: umeshlib@gmail.com

### **1. ABSTRACT:**

This study highlights the role of medical librarian as an integral part for medical research. As informationists, a new role for Medical Librarians are experts with training in both information science and clinical sciences and they retrieve and synthesize information and work in clinical and research settings. He needs to acquire professional skills in order to provide information services to the medical professionals. How health sciences Librarian will step to support researchers to overcome their self-directed activities by providing relevant information from the library advancements. This paper will address Introduction, Aims and Objectives of the study, Library Advancements for Research possibilities. Medical knowledge, skills, and social requirements for patient care are quickly changing, thus, doctors are anticipated to be life-long learners to provide effective care for the patients. This paper addresses instructional issues how to prepare medical students to be self-directed learners and how to improve medical school and postgraduate training curricula. Now the big question is self-directed learning (SDL) an agent in cultivating lifelong learning skills for medical students as claimed by educational experts? This will be the focus of my critical reflection on lifelong learn Medical knowledge, skills, and social requirements for patient care are quickly changing, thus, doctors are anticipated to be life-long learners to provide effective care for the patients. This paper addresses instructional issues how to prepare medical students to be self-directed learners and how to improve medical school and postgraduate training curricula. Now the big question is self-directed learning (SDL)

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**Keywords:** Medical Librarian; Healthcare Studies; Medical Research; Technology Advancements;

## 2. INTRODUCTION:

In 21st century medical profession makes medical librarians and their institutions more important than ever and role of medical librarians are changing and evolving with medical advancement by technology, research and development, publishing changes, and provides lots of tip and toes information. A Medical Library is established to serve the information needs of medical communities (healthcare professionals, researchers, students and patients) to find health and scientific information to improve, update, assess, or evaluate health care. Every day millions of health care professionals uses effective resources for research and innovation for new treatments, clinical procedures, clinical decisions and improve public health. The new developments are change the landscape for medical education and research are constantly emerging.

The library professionals in today's medical and health fields live in a fast-paced and ever-changing environment. Medical Libraries/Librarian's having a long history of conducting needs assessments of their stakeholder to determine where the library can best supports and provide a better-coordinated clinical research services to the faculty and researchers.

Medical Librarians are developing new skills supporting by the various discovery and research developments and better understand the information needs of

clinical and translational researchers by being identifying technologies that can improve healthcare outcomes. At health science libraries leveraging existing resources, bringing services together and how medical librarians will work in the future.

### **3. AIMS AND OBJECTIVES:**

The main aim of this study is analyze the library advancements will steps to better research with various supportive possibilities.

- To study the how library advancements will supports to medical professionals to do the best research.
- The Library Professional's how they involves for technological changes and research developments.

### **4. LIBRARY ADVANCEMENTS FOR THE RESEARCH:**

Now a day's many advancements in healthcare/ medicine are resulting for well-run clinical studies that evaluate the research performances various areas of medical field e.g. Health Information Research, Evidence-Based Practice, Clinical, Educational, Administrative Outcomes, Bioinformatics, Advanced Imaging, Consumer Health Information, Clinical Trials Data, Health Data Standards, Electronic Health Record (HER) and etc.

Conduct of research is a part of every activity. The growth of in importance of clinical research, population based medicine and issue of translation practice as well as basic science research gives academic health sciences libraries a wide range of possibilities for evolving supportive steps.

4.1 Building a knowledge repository: According to Liebowitz and Beckman (1998) define, "Knowledge repository is on-line computer-based storehouse of expertise, knowledge, experience, and documentation about a particular domain of expertise. In creation a knowledge repository, knowledge is collect, summarized, and integrated across sources".

Knowledge repository is a creating, storing, searching, accessing and retrieving of knowledge resources based on the proposed framework that suggest the integration from one database system (e.g. DSpace, Green Stone & etc) that enables and facilitate the access of knowledge seekers and researchers login to the database through various information technology tools anytime, anywhere 24/7 in a week, the access of contents which are free or subscription.

Building a knowledge repository is depending on integration of e-libraries one system that can enables students, researchers, academics etc to access and upload or publish their works to preserve the knowledge repository for long term for the future practice of healthcare professionals makes use of it.

4.2 Building on the library's expertise: A knowledge library is a place for users to access the information which they need. Librarian skills and techniques are very much important to building collections for acquire, access and retrieval. As clinical librarian he needs to have professional and communication skills for specialized information search, content production, resource manage (digital databases) and familiarity with various sources related to evidence-based medicine, teamwork and effective communication. The traditional collections focus on building digital collections. Nowadays users prefer digital preservation for access of 24/7. As Librarian will expertise some specific skills needs on collection development, cataloguing, research skills, documentation, basic computer and digital skills.

4.3 Technological infrastructures: Technology modernization is required to remove the burden of maintaining obsolete technology and to replace it with solutions are exploit current technology and share the technical infrastructure. Modernization of technology may encompass broad replacement of legacy systems/ any technology upgrade or improvement to the health science libraries. In change of technology improvisation of access and delivery of information in current technology efforts are library management system, library website, bibliographic retrieval systems, image management system, web collaborations, shared cataloguing systems (e.g. OCLC) and etc.

4.4 Essential skills for lifelong learners: Medical doctors are anticipated to be lifelong learners to provide effective care for their patients and it is continuous supportive process which empowers people to obtain all the knowledge, attitudes, and skills all these requires in their lifetimes and apply with confidence, creativity, and happiness to overcomes from their learning and research activities of literature search, evidence-based healthcare, practice, advanced images and many more are core part of the library's mission. e.g. SDL- Self-directed Learning, PBL- Problem-based Learning, TBL- Team-based Learning, Self-Monitoring.

4.5 Scholarly information and knowledge: Medical Librarians are an integral part of the health care team. They have a direct impact on health care and the quality of patient care by helping physicians, allied health professionals. They teach how to use medical-related software programs, online resources, search engines, and how to search the internet for up-to-date evidence-based medicine and other medical information. They provides guidance and tools to leverage the most authoritative information and knowledge. And also serves as a center of excellence for expert literature retrieval services, user trainings, and consultation. Traditional and digital libraries serve as gateways to the knowledge required for research advances and clinical care.

4.6 Data preservation and information for the future: Preservation according to institution standards and guidelines, use of the most effective methods available and may participate in research, development, testing and evaluation of preservation technology. To maintenance of cultural context of collection, collection development criteria will be interpreted with flexibility in acquiring information in relating to history of medicine and other requirements e.g. institutional repository (DSpace, Greenstone and etc).

4.7 Create a good environment: Medical Librarians will practice to change the technological advances and economic realities to create good library environment and the interesting context is Open Library Environment (OLE) is defined as a next-generation technology environment and it has been developed as current Integrated

Library System and supports for health information needs through resource sharing (ILL), e-cataloguing records and shared data will expertise through publications and collaborations.

4.8 Central facilities: Medical Library is a platform for building community and facilitating collaboration among the academic and independent research libraries by the knowledge, expertise, ideas, and energy in its community. Libraries will create Research and Development centres, high-tech instrumentations/technology under the supervision of tech savvy trained staff of the researchers and other faculties, acquire latest contents print as well as digital versions (e.g. DSpace, Web of Science and other various databases) and also conduct of workshop, seminars, conferences, guest talks, special lectures and hands-on training.

#### **5. CONCLUSION:**

This study highlights the Medical librarians are skilled professionals whom to assist with information resources and research in the medical professions. The focus of the librarian is to emphasize the use of medical research and practice. As well he is expected to be a resource person for assisting with publishing and presentation of advanced research, use of web based resources to conduct research and helps to generate evidence-based approaches to healthcare field. He involves to build best research and development activities in the field of Medicine, Medical professionals to view of patient care, guide to the students from the use of library various advanced technologies and will make them to become good medical professionals.

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