CHAPTER 1

INTRODUCTION

1.1 Background

Throughout the world, libraries and librarians perform functions on behalf of society. These functions are to acquire, preserve, organize, analyze and provide subsidized access to the accumulated data, information and knowledge generated by its citizens. So it can be said that "Librarianship is generally considered to be concerned with the principle and practice of selecting, acquiring, organizing, disseminating and providing access to information in accordance with the specific needs of groups of people or an individual." 

As librarians are familiar with the historical development of the profession as well as its knowledge, skills, values and practices, only a brief definition of the field is necessary. This definition is taken by the field of library and information studies as concerned with –

"...recordable information and knowledge, and the services and technologies to facilitate their management and use, encompassing information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation, analysis, interpretation, evaluation, synthesis, dissemination and management." (American Library Association, 1992)

Librarians perform these services in support of humanity, either individually or in the aggregate, and they perform them regardless of their particular physical location or venue. While it is possible to practice librarianship outside of a library using virtual

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information, the function that libraries perform in aid of civilization primarily involves physical artifacts or their digital representations that have been created to be disseminated to other individuals or groups.

While all library professionals perform these functions, this study focuses on a specific sector - health sciences. Medical Library Association’s (MLA) core vision statement, “Quality Information for Improved Health”, easily embraces traditional roles of acquiring, organizing, storing, retrieving, and disseminating quality information to health professionals and patients. These skills and the education required to perform them will remain vital components of health science librarianship.

“Health Science Librarianship is a service that deals with health related information, its structure, acquisition and use”.

Health sciences librarians are health information professionals who have specialized knowledge in quality health information resources. They have a direct impact on the quality of patient care by helping physicians, allied health professionals, administrators, students, faculty, and researchers stay alongside each other of and learn about new research developments in their fields. Using materials varying from traditional print journals to electronic databases and mobile devices, health sciences librarians create and use innovative strategies to access and deliver important information for patient care. Health sciences librarians are reference and consumer health librarians, web managers, medical informatics specialists, and chief information officers, as well as cataloguers and instructors. Health sciences librarians work anywhere health information is needed, including hospitals, academic medical centers, and clinics; colleges, universities, and professional schools; consumer health

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libraries; research centers and foundations; industry, including biotechnology, insurance, medical equipment, pharmaceutical, and publishing; and federal, state, and local government agencies. MLA’s vision also embraces more specialized skill sets that are only for services needed in hospital and academic medical libraries. Now here the term ‘Medical Librarianship’ comes to fulfill those skills. So, it can be said that, “Medical librarianship is a service profession to provide health information about new medical treatments, clinical trials and standard trial procedures, tests, and equipment to physicians, allied health professionals, patients, consumers, and corporations. They help healthcare professionals to provide quality care to patients, help patients find information, answer consumers’ questions and provide information to the healthcare industries. Medical librarians become web managers, medical information experts, chief information officers as well as cataloguers, instructors and reference librarians.”

During the last four decade there has been concern within the health libraries profession worldwide that even as librarians are teaching and educating clinicians about good practice through evidence-based healthcare, the library profession has been operating without this evidence-based background. Evidence-based practice requires that decisions about healthcare and based on the best available, current, valid and relevant evidence. These decisions should be made by those receiving care, informed by the tacit and explicit knowledge of those providing care, within the context of available resources.

Evidence-Based Librarianship (EBL) cannot function without adequate research evidence, as this is its core element. There is now a growing level of consciousness about EBL, through publications, conferences, and courses covering EBL, such as the National electronic Library for Health (NeLH) sponsored portfolio course in EBL. This is having a knock-on effect of improving the level of workplace research and evidence on which to improve practice and encourages the implementation of research in the workplace. A key definition of EBL may be as follows –

"Evidence-based librarianship is an approach to information science that promotes the collection, interpretation and integration of valid, important and applicable user-reported, librarian observed, and research-derived evidence. The best available evidence, moderated by user needs and preferences, is applied to improve the quality of professional judgments."

EBL seeks to improve library practice by utilizing the best available evidence combined with a pragmatic perspective developed from working experiences in librarianship. EBL represents a global approach to information seeking and knowledge development, involving research. The EBL process enables health science librarians, especially medical librarians to integrate research findings into their daily practice by focusing upon a specific problem in need of immediate attention. The EBL process consists of formulating a practical question, searching for the evidence needed to answer the question, and systematically evaluating the gathered evidence for its usefulness and validity of answering the initial question.

The specific EBL process outlined in Figure 1.1 attempts to combine the scientific

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strictness of the EBL process with flexibility to address the unique circumstances of health science librarianship.

![Diagram of EBL Process](image)

**Figure 1.1: EBL Process**

EBL values research in all its diverse forms and encourages its communication, preferably through peer reviewed or other forms of authoritative dissemination.

While attending an international congress on medical librarianship, Archibald Goodall, an American physician noted the change in librarians’ perception of their role. He stated that librarians considered one of their main functions as protecting clinicians from the ‘drudgery’ of searching literature, checking references and making bibliographies, effectively making themselves responsible for the level of culture at
Clinical Medical Librarianship (CML) started life in America in the early 1970s through the efforts of Gertrude Lamb at the Kansas City School of Medicine, University of Missouri. She identified a gap between what medicine as discipline knew about good patient care and the knowledge that was actually applied to the care of patients\(^\text{10}\). She proposed that librarians and specially trained information experts should be active members of health care teams, familiar with aspects of clinical medicine and involved in the work of patient care teams\(^\text{11}\). The idea of the service, as originated and publicized by Gertrude Lamb, was to provide access to information for patient care in the same way that Laboratory results are requested from the bedside\(^\text{12}\). Clinical librarianship is further defined as –

"...the provision of quality-filtered case-specific information directly to health professionals to support clinical decision-making\(^\text{14}\)."
The Internet has dramatically increased the amount of electronically accessible medical information. The Internet enables the medical profession and consumers to have more information to make decisions and this could lead to better medical decisions and outcomes. However, without the assistance from professional clinical-medical librarians, retrieving and filtering new and relevant information from databases and the Internet remains a challenge. The clinical librarian can bring expertise in the selection, preparation, and dissemination of systematic reviews of related literature to the health care profession. Direct librarian involvement in Evidence-Based Medicine (EBM) during the past decade represents one of the most significant recent developments in health science librarianship.

Clinical Librarian: who are they?

For years, progressive thinkers have warned that the survival of health sciences libraries depends on exploiting new forms and structures for the capture and delivery of information and on an active pursuit of roles beyond the library’s walls. The availability of easy-to-search, free-access medical databases on the World Wide Web alters the librarian’s traditional information-mediator role. In the midst of competition and change, many of them have begun to shift from traditional work of an information gatekeeper to embrace the crucial new role of a knowledge worker\textsuperscript{15}. As knowledge worker, clinical librarian become involved in the development of information products and services targeted toward individual client needs\textsuperscript{16}.

Clinical Librarianship seeks to integrate information professionals into healthcare teams, mainly through their attendance at ward rounds and meetings in the clinical


setting. The aim is to support clinical decision making and education by providing timely, quality filtered information to clinicians at the point of need. Such activities attempt to promote evidence-based healthcare, with the ultimate goal of improving patient care, as well as enhancing clinicians' use of research literature and knowledge of library and information resources. To define the role of Clinical Librarian, it can be said that “a clinical librarian is assigned to an inpatient service and attends rounds and conferences with the patient care team. He/she as a member of the patient care team, listens to the discussions of patient care problems, taking care to note questions that can be best answered by knowledge based information from the library. The information delivered back to the patient care team has been quality filtered for the correct or best reference for the specific case in question. The clinical librarian searches current medical literature for answers to questions relating to patient care and management and provides the clinicians on his/her assigned hospital service with relevant articles. The review of the actual journal article for its appropriateness sets the clinical librarian apart from a library service that provides a bibliography or a list of citations in response to a question. The clinical librarian saves the patient care providers time and improve the quality.”

Figure 1.3: Clinical Librarian

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Skills and Activities of Clinical Librarian

Clinical librarians are the individuals coming from Library and Information Science or Informatics background, with thorough knowledge in clinical medicine, laboratory research, public health or other health care/research specialty and also versed in research methodology, critical appraisal of literature and information seeking.

A clinical librarian should have the following skills:

- Development of good rapport with other healthcare professionals
- Ability to use technologies
- Good command over oral and written communication
- Ability to search and critically appraise information
- Ability to develop retrieval strategies and techniques

The key activities taken by the clinical librarians are:

- Performing information searching
- Attending clinical audits meetings
- Attending journal club, conferences and clinical meetings
- Providing search skill training
- Performing critical appraisal
- Attending ward rounds with healthcare teams
- Developing clinical guidelines
- Promoting/marketing service

A new model identifying the key skills and activities for the UK clinical librarians has been derived by Harrison and Beraquet drawing together the findings from their research and existing literature —

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For a clinician, the term clinical information encompasses not only the information in the biomedical literature but also the information derived from the patient, whether this is the patient they are treating at the time or a collection of patient records. Gains in clinical knowledge come both from consideration of the literature, which will largely represent the views of other clinicians or the consensus view of a group of clinicians, and also from personal experience gained in direct clinical care. The clinical librarian needs to be aware of the accumulation of clinical knowledge and

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how such knowledge is used in clinical decision making. Of particular interest is the weight placed on personal case related knowledge and the differences between expert and novice decision makers²⁰.

Benefits of Clinical Librarian Service

Like all information professionals, a clinical librarian or a clinical informationist²¹ or the newer concept of an information specialist in context²² can make a difference in patient care, the education of healthcare providers and research. The literature has proven this, especially the reports of the Rochester Study²³.

There are several benefits of Clinical Librarian Service for hospital or healthcare institutions, clinical staff and patients. These are –

- **Benefits to hospital or healthcare institutions** –
  - Meeting the clinical governance agenda.
  - Promoting evidence-based practice, to ensure clinical and corporate decisions are supported by research.
  - Providing a mechanism to support a questioning and learning culture.

- **Benefits to busy clinical staff** –
  - Time saved.
  - Bridging the literature-practice gap, overcoming barriers to getting information into practice.
  - Quality assurance that the best evidence has been identified.

Benefits to patients –
  o Quality patient care.
  o Individualized care on the basis of the best evidence available.
  o Well managed hospitals.

1.2 Objectives of the study

The objectives of the study are:

- to identify whether the private hospitals in Kolkata are aware about clinical
  librarianship or not;
- to find out the prospect of a clinical librarian as a valid member of health care
  team in the private hospitals;
- to establish the importance of clinical librarian in patient care, clinical decision
  making, medical education and research;
- to assess the role of hospital librarian in this context;
- to find out the problems in implementation of clinical librarianship in the
  private hospitals of Kolkata; and
- to identify clinical librarianship as a course of study in the Library and
  Information Science (LIS) education in India.

1.3 Research Problem

The present research problem is conceived under the title, “Clinical Librarianship in
Kolkata with special reference to Private Hospitals”.

Hypothesis of the study

The hypotheses envisaged are:

- The private hospitals in Kolkata are primarily unaware about clinical
  librarians’ service;
- Clinical librarians may be a valid member of healthcare team in the private hospitals;
- Clinical librarians may have importance in clinical decision making;
- Hospital librarians may have come out from the walls of the library and take their service to the healthcare team and provides responses to information questions regarding patient care;
- Financial problems may occur in the implementation of clinical librarianship in the private hospitals in Kolkata;
- Human resource problem may occur as no LIS school provides courses on clinical librarianship in India;

1.4 Significance of the study

Clinical Librarianship (CL), currently receiving renewed interest world-wide, seeks to provide quality-filtered information to health professionals at the point of need to support clinical decision-making. A clinical librarian takes the library and the librarian’s skills to the point of care, and provides clinicians with evidence that helps them to offer the best care to patients. From the above discussion, it can be said that "the role of clinical librarian includes answering the immediate needs of clinicians for patient care, providing literature searches and articles to support the evidence, supporting the development of new guidelines based on all activities carried out under this role and proactively creating resources for evidence based care."  

The need for clinical librarians who will save precious time for healthcare professionals who are always short in number, and who will by their services, contribute to enhancement of patient care, has been established in several studies.

However, even with concrete proof of this need, the evolution of such professionals has been slow even in developed countries.\textsuperscript{25}

In the Indian context, there are two reasons for serious consideration of the need for clinical librarians—

- Doctors in India are harder pressed for time than their counterparts in other developed countries. Because of Indian's huge population, they treat far more patients than these colleagues on an average day. But, while our Indian population has been termed a curse most of the time, it is up to us to convert this to an advantage, to the maximum extent possible.

- We have a huge number of candidates who try for medical college seats every year, and a huge percentage of these candidates do not make it to the MBBS or the other related courses. Many choose to do degrees that have nothing to do with medical or related subjects. If these candidates could do a degree in Biological science followed by degrees in Library and Information Science with a specialization in Clinical Librarianship, they could come up with a new type of professionals who would be in the medical profession—deeply involved in a non-practice area. These professionals may gain tremendous satisfaction in contributing to patient care through a very different approach.

The need for the position of clinical librarians in India is very strong. Creation of highly skilled professionals who would reduce the burden of finding the best medical information, for healthcare professionals would definitely enhance patient care. But no study has been made in this regard. As such, a study focusing on the awareness, infrastructure, prospect and problems of establishing clinical librarian in clinical

decision making in different healthcare settings has been felt necessary to improve patient care in Indian context. The importances of this study are –

- From this study, it will be revealed that whether the healthcare professionals working in private hospitals in Kolkata are aware about clinical librarian service and its benefits or not.
- In this study, there are discussions on activities, problems and prospects of clinical librarianship in private hospitals of Kolkata, so that the scenario of clinical librarianship can be revealed.
- From this study, the gaps between the ideal clinical librarian service and the service provided by the hospital librarians in private hospitals of Kolkata will be discovered.
- The prospect of clinical librarian as a valid member of healthcare team in private hospitals will be exposed in this study with the establishment of importance of clinical librarian in patient care, clinical decision making, medical education and research.
- From this study, the problems in implementation of clinical librarian service will also be identified.

1.5 Chapterization

The thesis is presented in eight chapters –

- Chapter 1 introduces the background and benefits of clinical librarianship. It also explains the need for this research study in the present context. It states the research problem, its objectives and hypotheses formulated. It further explains in brief the significance of the study. It also presents a brief view on different chapters of this thesis.
Chapter 2 presents a review of literatures on the research topic and related aspects of the theme. Apart from literature on clinical librarianship, the aspects of study included are health science librarianship, medical librarianship and evidence-based librarianship. Special emphasis has been given on evaluative studies on clinical medical librarian programmes and their success in enhancement of patient care. Indian scenario has also been discussed in this chapter. Literatures on medical library education have also been reviewed.

Chapter 3 presents the status of clinical librarianship in seven continents viz. North America, South America, Europe, Africa, Asia, Oceania and Antarctica with brief account of history of clinical librarianship in the USA and the UK. The chapter also presents the scenario of clinical librarianship in fourteen cities of India, viz. Delhi, Mumbai, Chennai, Bangalore, Hyderabad, Ludhiana, Lucknow, Pune, Ahmedabad, Nagpur, Indore, Coimbatore, Kochi and Thiruvananthapuram. According to the WEEK/ HANSA Research Survey 2011, a number hospitals from each of above mentioned cities have been selected from 804 hospitals, are the best multispeciality hospitals in India with exclusion of hospitals from Kolkata.

Chapter 4 presents a brief account of the state of West Bengal, its demographic characteristics, healthcare system and role of private hospitals in healthcare system. It also gives briefly an account of its capital Kolkata and thirty one private hospitals which are multispeciality in nature and with minimum fifty bed capacity.

Chapter 5 describes the methodology which has been adopted for this study. It includes description of survey methods, formulation of questionnaire, statistical techniques used in analyzing and presenting the research data in the
form of graphs, charts, tables and figures. It further explains in brief the scope and coverage of the study.

- Chapter 6 deals with the evaluation of effectiveness of clinical librarians on the basis of available literatures. One discussion based on review of literatures regarding evaluation of clinical medical librarian programmes has been stated in this chapter to prove hypotheses.

- Chapter 7 presents the facts and findings of the study. After collecting data from healthcare professionals and hospital librarians, data have been analyzed with different tables and figures. Interpretations have been discussed elaborately in this chapter. It also provides various aspects and problems relating to clinical librarianship by SWOT Analysis.

- Chapter 8 presents the conclusion of the study with the development of a model framework as standard for clinical library and information services in India which relates to proper infrastructure for evidence based practice by healthcare professionals in clinical decision making after introduction of clinical librarian. Suggestions also include a proposal for a coursework for clinical librarianship within the setup of LIS education system in India. Scope for further research has also been discussed.

- The references used in this work have been compiled and presented at the end of all the chapters. References taken from other works have been mentioned in the corresponding footnote area in the text and all these references have been cumulated and arranged alphabetically. The references are compiled on the basis of American Psychological Association (APA) citation style from the 6th
At the end of the thesis, there is an appendix part which contains the questionnaire for healthcare professionals, questionnaire for hospital librarians, a directory of private hospitals in Kolkata, a directory of clinical librarians working in the UK, photographs and author index.

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