# Medical Librarianship as a Specialisation: A Conceptual Review

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#### ABSTRACT

The medical libraries have played a vital role in disseminating information for different user groups in variety of settings in the health science institution. There are various programs such as The 'LATCH programme', 'medical informatics', 'clinical medical librarianship', 'clinical informationists', 'evidence based medicine' and, 'consumer health library services. Libraries also are undertaking training program called 'Health Information Literacy'. There are some skills like quality filtering and critical appraisal of the literature, notable for information services. Yet, there are many skills required to learn for efficient and effective service to the medical community and hence there is a requirement to consider the 'medical librarianship as specialization program' from general librarianship.

**Keywords:** Literature attached to the chart (LATCH) programmes, medical informatics, clinical medical librarianship, clinical informationists, evidence-based library information practices, consumer health library service, health information literacy, MEDLINE

#### 1. INTRODUCTION

Medical libraries have been evolving in consonance with the development health care services and institutions. In its evolution there are some distinct tools, services, techniques, users' languages, users' pressure, user needs and domain knowledge for medical librarianship. The knowledge of general librarianship is insufficient for the nature of professional service required for medical community and institutions.

Santiago<sup>1</sup> opined that the carrier of a medical librarian has become increasingly complex due to the explosion of information and new information and telecommunication technologies. As per MLA<sup>2</sup> (Medical Library Association, USA) medical librarians, as service professionals, need to provide health information about new medical treatments, clinical trials, and standard trial procedures, tests and equipment details to physicians, allied health professionals, patients, consumers, and corporations. Lindberg & Humphrey<sup>3</sup> identified different user group for medical libraries such as health care professionals, patients, educators, students, researchers, and a ministrators who may need theaccess from their home, offices, wards, clinics, and libraries. Dorrington<sup>4</sup> pointed out that clinical information needs are related directly to the care and treatment of the patient. Santiago<sup>1</sup>, viewed clinical information needs are different from those related to research, education, and administration, because clinicians require rapid

access to practical knowledge that can be applied to patient care.

Holst opined that most significant developments, in health science librarianship, have been evolved for the past 50 years, who are working in hospitals and other health care delivery settings and program developed from time-to-time. Medical librarians have been providing hands-on training for database searching, document delivery, support evidence-based medicine (EBM) and clinical medical librarianship which later termed as 'informationist' by Davidoff & Florence<sup>5</sup>.

Masys<sup>6</sup> identified two main function of medical field: medical procedures and management of information life cycle. It was stated that half of the industry's function is information-related and they spend equivalent amount of time on informationintensive industry. Most of the medical library services are technology-intensive and must strive to keep up-to-date with changing technologies and issues in librarianship.

Marshall<sup>7</sup> predicted the future role of library and information services, particularly to meet the information needs of clinicians. Clinical librarians are:

- To be part of health care team to provide enhanced information services,
- To serve literature searches and articles related to a specific patient care problem (LATCH),

- To support and train end-user in searching computerized databases such as MEDLINE and other health care databases,
- To help users to apply quality filtering or critical appraisal of the literature, and
- To integrate clinical information systems with the patient record.

All the above identified services and works requires additional training to undertake various specialised services.

#### 2. SPECIALISED SERVICES

#### 2.1 Literature Attached to the Chart (LATCH) Programme

The 'literature attached to the chart (LATCH) is one of the earliest services that attempts to link relevant information contained in the health care literature to support patient care. As per Sowell<sup>8</sup> LATCH was developed at the Washington Hospital in the mid-1960s, where librarians placed several key articles with a chart at the request of an attending health professional, eventually resulted over 1,000 LATCH packages that were kept and updated in the hospital library for continued use, but there was noparticipation to librarians in patient care rounds, as a result, the librarians could not anticipate information needs like clinical librarians. Thus, the role of the librarian in this programme is just to facilitate information on request. Clevesy's9 worked out in by combining librarian participation with a LATCH service in community hospital at Kansas city and Algermissen<sup>10</sup> called as clinical information delivery'7.

#### 2.2 Medical Informatics

Medical informatics is basically a machine-generated data and medical data. Blois & Shortliffe<sup>11</sup> defined that "medical informatics as a storage, retrieval, and optimal use of biomedical information, data, and knowledge for problem solving and decision making". Perry<sup>12</sup> et al. defined it as "health-related information, its structure, acquisition, and use" and mentioned that health sciences librarianship and informatics are heavily overlapping with strong conceptual links to the theoretical discipline of information science. Dalrymple<sup>13</sup> opined that medical informatics focuss only on technology to embrace a deep understanding of biomedical information systems, the distinctions between medical librarianship and medical informatics have blurred. Frisse<sup>14</sup> et al. argued it as crossroads between biomedical science and information technology, with a focus on developing and delivering information systems that support health care, decision making, databases for outcomes analysis, and health sciences research and administration

#### 2.2.1 Medical Informatics versus Health Science Librarianship

Health sciences librarianship is to handle biomedical scholarly communications and has been on management of print-based published literature and using bibliographic systems. In twentieth century, medical librarians have focused more on meeting the information needs of the health professional, not the patient or consumer. The expert knowledge and practice of medical informaticists has been primarily medicine, rather than information. Furthermore, recent trends in medical informatics have extended beyond knowledge-based information (the literature) to patient data, witnessed in the development of electronic health record. The interests in both these areas are limited to support good clinical practice. However, both systems have been affected by external trends, placing them on a collision course with one another. The medical librarian now deals with electronic literature and extends the reach to patients and consumers, in addition to health professionals.

#### 2.3 Clinical Medical Librarianship

Clinical librarianship is a specialised service, originated in early 70s, popularly called as clinical medical librarianship, was first introduced by Lambat, University of Missouri-Kansas city medical library<sup>15</sup> and MLA (1973) projected the library "we take the library to the user out of the walls." Kane<sup>16</sup> suggested medical libraries to support patient care, education, and research, (Giuse<sup>17</sup>, *et al.*) to work closely with physicians, social workers, pharmacists, nutritionists, interns, nurses, patients, and families. Clinical librarian eventually is taking the library to the point of care and accompanies physicians on their clinical rounds, attends medical conferences, and continuing medical education programs.

#### 2.4 Clinical Informationist

The term informationist was evolved in 2000<sup>18</sup> to operate within a clinical environment and are trained in both information science and clinical sciences to find, synthesise and present information on a routine basis and as a team member of clinical round. Davidoff<sup>5</sup> mentioned that a health information professional with added gualifications, gained to work collaboratively and on equal footing with medical and health professionals to meet information needs that arise during both direct patient care and medical research. Detlefsen<sup>19</sup> illustrated it as a model of collaboration between the two fields. It is perceived that clinical informationist is an extension of the existing clinical librarian role. Kelly<sup>15</sup> suggested that a professional having the knowledge of information-seeking skills, informatics and the clinical subject would be appropriate to work as informationist and to contribute better at patient care, medical education and clinical research<sup>20</sup>. In digital environment, librarian is not tied to a physical library space, librarians to provide information to the point of need and to assist at patient care decision-making.

#### 2.5 Evidence-based Medicine

Evidence-based medicine (EBM) literatures are like a special breed of literature, to assess the risks and benefits of treatments and diagnostic tests<sup>21</sup>. It requires critical appraisal of the medical literature and the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external evidence from systematic research<sup>22</sup>. The practice of EBM involves literature search and appraisal skills that are part of the core knowledge of librarians and hence libraries to become centers of evidence and librarians to play a proactive role as educators and facilitators and work more closely with health professionals<sup>23</sup>. Medical librarians are being well equipped with the necessary skills, tools and resources at the point of care as well as research and education.

# 2.6 Consumer Health Library Services

Consumer health information services are often hospital based, but can also be based in communities within public libraries<sup>18</sup>. The healthcare environment of today places great emphasis on patient health education. Consumers now engage in search of information on their own to increase their knowledge of treatments and procedures and to reduce fear and anxiety about their conditions. This has resulted in a demand for quality information written in lay terminology, which in turn has increased the demand for librarians specially trained to locate and disseminate this information. IFTF<sup>24</sup> opined that consumers are "look towards the marketplace for tools that enable them to self-diagnose, selfmonitor, self-test, self-treat, and so on". Scherrer<sup>25</sup> felt that it is like taking the library to the users' (point of need) and enter the consumers' field to offer sound information. Dismukes<sup>26</sup>, also of the opinion that librarians can assist patients, who are independently seeking information that can be tailored for a particular lifestyle, using methods like bibliographies and reading guides, or through current awareness services and social networks. Ludwig<sup>27</sup> considers it as a standard service offered by health science libraries of the future. It is indicated that most of the libraries are offering consumer health library services in USA and other western countries effectively cited by Kelly<sup>18</sup>.

#### 2.7 Health Information Literacy

American Library Association (ALA) defined it as "a set of abilities needed to recognise a health information need and identify information sources, assess the quality of the information and its applicability to a specific situation, (analyse, understand, and use) the information to make good health decisions". Medical library association<sup>28</sup>, in context of academic environment, suggested that key issue is to make users know the resources well and using different versions of core databases<sup>4</sup>. Palmer<sup>29</sup> remarked that well served bibliographic databases, electronic full-text journals, electronic books, and Internet resources do not come from just one provider but from many, so the challenge for librarians is to provide users' with the skills not only to be able to search resources but to determine which one is best for their specific enquiry and how to evaluate the content. Librarians are also major supporters of evidence-based practice, assisting clinicians and others to make optimum use of information.Recent developments in webbased support for learning to use software such as WebCT and Blackboard are providing libraries with new methods of delivering and supporting information literacy programs. The introduction of library portals, it is hoped, will encourage users to make better use of library resources and not to rely on generic search engines such as Google to find information<sup>4</sup>.

# 2.8 Quality Filtering and Critical Appraisal of the Literature

Clinicians to access and evaluate the literature, its content on a scientific basis, needsquality filtering or critical appraisal skills, for which there are many guidelines. Of course, critical appraisal needs of clinicians are different from researchers because clinicians need to establish the relevance of the study findings to the care of their particular patients as well as the scientific validity of the results<sup>30</sup> Librarians provide information using 'quality-filtering'<sup>17</sup>, helps users to develop literature search skills for critical appraisal criteria, and teach the search techniques.

# 3. CONCLUSIONS

Medical librarians are an integral part of the healthcare team. They have a direct impact on the quality of patient care, by helping physicians, allied health professionals, faculties, and researchers to stay abreast of new developments in their specialty areas. They also work closely with patients and consumers who are seeking authoritative health information (MLA). The role of the medical librarian has become increasingly complex. As the medical librarian has to extend various specialised services using various programmes like LATCH, medical informatics, clinical medical librarianship, evidence-based medicine, consumer health library services, health information literacy, and as an Informationists, in different context either in the library or in clinical environment.As informationist librarians can provide specialised services to health care providers and supplement the resources using web-based clinical queries, quality filtering and critical appraisal of the contents of the scientific literature. With all these importance, it is very clear that there is aneed to consider the medical librarianship as 'specialisation'.

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