

An Overview of Health Informatics and Health Science Librarians' Role

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Abstract: Health informatics focused on specific domain knowledge whereas Librarianship structured on generic subject areas. The health Science Librarians should acquire, exchange, organize and share knowledge. The skills required are acquire and preserve knowledge resources for future use and requires to understanding of both biomedicine and information science. The health Informatics specialists requires to have the domain knowledge in addition to health science librarianship. This paper highlights the role of Health science Librarians in Health informatics.

Keywords: Informatics, Health science Librarianship, Health Informatics, Role of Health Science Librarians

I. Introduction

Technological innovation began from research, education and from computers. Informatics is the application of computers and information sources to different disciplines to develop research, Clinical practices, education and administration. Computer science, information science, cognitive science, and telecommunications are all included in the multidisciplinary field of informatics. Practitioners can handle clinical issues with the aid of informatics, which also provides current and accurate information. Advances in Information Technology created significant opportunities for the Health care informatics. The internet enables the transmission of information of any health care professionals and organizations. Informationist must understand both information science and clinical work.

Health Science Librarianship

Health Science Librarians means Librarians who work in healthcare environment. Librarianship as a service oriented profession. The informationist model provides a new opportunity to the Librarians to join together. Librarianship and Library Professionals have strong foundation in information science. Librarians support learning through iPad, iPhone and other mobile technology for reference. The National Library of Medicine supporting a pilot project to encourage and support the make use of internet in community healthcare settings. The health Librarian is an agent to participate in and manage organizational change. The health Librarian is one few professionals in an organization to know something about everyone does. Should have skills in the organization and management of information, understanding and interpreting information needs and apply information resources to solve problems. Health Librarian should have good communication skills to provide service to the users.

Librarians should have professional Ethics, should be "humble, patient, reliable, refined and respect Library users". Knowledge of critical thinking, familiar with information technology, use of Internet tools and social media. Librarians should be know of the techniques of investigate of various health related databases, Reference Manager Software's, research support tools, Plagiarism detection software's, literacy of scientific publication. Librarianship in the digital context focuses on information management, users and use. Health science Librarians can work in plethora of places which includes health organizations, medical schools, health information centres etc.

Health Informatics

Informatics appears in French as an "Informatique" means "computer science is the study of computers and their application". The science that studies the organization, acquisition, and application of health-related data is known as informatics in health science. Mainly focused on diagnosis, decision making along with computers. Deals on Health issues, Digital revolution and Health care have made information management a major activity of Health care professionals. "A wide range of issues in the management and use of biomedical information as well as medical computing and the study of the character of medical information itself" is what medical informatics is defined as. Health informatics is defined as "a collection of clinical informatics (including subfields such as medical, nursing, and dental informatics) and public informatics" by the American Medical Informatics Association.

Dental Informatics

In the area of medical informatics also includes dental informatics as a specialisation. It enhances research, teaching, and patient outcomes. Information technology makes it possible to store, manage, access, filter, and use data. Increasing the quantity and quality

of dental care is the challenge. MEDLINE-indexed publications first used the term "Dental Informatics" in 1986. For evidence-based dentistry, it created a database. Dental informatics aids the medical professional in enhancing patient outcomes and resolving clinical issues.

Pharmacy Informatics

Pharmacy informatics falls within five categories – Information Management, Knowledge Delivery, Data analysis, Clinical Informatics, Change Management. The Pharmacist safeguards patient's safety, check the dose is approximate to the patient, drugs interaction with any medications the patient already taking. Pharmacy professionals should be involved with the design and implementations of computer entry. The Pharmacy informatics for a patient health care system follow the healthcare settings. Check the data flowing from system to system. Pharmacist must use clinical decision support tool to enhance healthcare. Collaboration between pharmacist technicians, doctors, nurses, IT staff, and other healthcare professionals is a key component of pharmacy informatics. Their role focuses on development, maintenance, utilization of databases and systems. They play an important role testing of technologies, streamline workflow, reporting functionalities and creating education to use technologies by other healthcare providers.

Nursing Informatics

Applied to clinical practice, management, education and research. Recording of patients data, analyzing the report, review of the outcome, distance learning and teaching through Internet, using a standard data set to evaluate the outcome and recording the workload. Nurse's use, collect and record health information and it is the responsibility to keep privacy, confidentiality and security of health information. A nurse should know about the general applications such as word processing and specific applications such as clinical information system, trends in computing affected the swift flow of work. Every nurse be educated in computers to keep digital patient records, research advances, use fresh devices, monitoring current equipments. Information science, computer science, and cognitive science are all combined to make nursing informatics. The goal of nursing informatics is to get the right information to the right people at the right time to do the right work at the right cost.

Physio-Informatics

The term is defined as "quantitative measure of the information carrying capacity of a physiological system". It's a system where human physiological systems to information, optimize the use of informatics in the design and delivery of physiotherapy services. The home care settings need the use of portable, point of care graphical user interface.

Health Science Librarians' Function in Using Health Informatics

Library professional should have Leadership skills, good communication skills, understanding the use of evidence-based Medicine, Research methods, use of latest tools and technologies, implementation online training programs, knowledge of medical terms, current awareness services, use of Health information system. The clinicians have sufficient knowledge of research which improves health care services. The health science Librarians are responsible for locating the right resources to its users. Experts in searching the Internet and offering specialized services, resources and databases

Health sciences librarians play the following responsibilities in health informatics:

Embedded Librarian: This is the primary user. The liaison job and the informationist role are the two types of embedded librarianship.

In their liaison position, librarians facilitate information exchange between the library and its patrons in order to enhance collection quality and meet patron requirements.

Informationist role: Librarians assist users by reading complete texts of papers, identifying pertinent material, and composing summaries of findings and results. This allows them to address clinical questions.

Clinical information specialists: Librarians with specialized knowledge in clinical and scientific fields, acquired through graduate study or hands-on training.

Bioinformationists: This multidisciplinary area creates and enhances techniques for biological data organization, retrieval, storage, and analysis.

Public health informationists: Librarians supply information to individuals employed in the field of public health. They offer information when it's needed.

Disaster Information Specialist – The Health Science Librarians contribute information on Disaster and distribute updated information to its users very quickly.

Librarian for Systematic Reviews – It is an overview of the literature that rates and analyzes research on a specific topic.

Emerging Technologies Librarian - In the Tech savvy era the role of a health Sciences Librarians connected to user to information, focus on methods used to deliver services and information to its users. The Librarians design and develop Website and update the information provides point of care services.

Continuing Medical Education: Instructional programs designed to support physicians in enhancing, expanding, and maintaining their knowledge and abilities. In order to provide Continuing Medical Education, librarians can collaborate.

Grants Development Librarian: Researchers and clinicians are unaware of the various grant types that are available. Health sciences librarians assist clients in obtaining funding for their investigations and projects.

Data management librarians: these professionals assist researchers in creating effective and efficient data management plans.

Impact of Health Informatics on Librarianship

The fundamental functions of Librarianship are to acquire, preserve, organize analyze and provide access to the accumulated data. The Librarian should have knowledge and skills to gather the desires of the health professional. The Health Science Librarians understand and provide linkages between information resources and those who seek assistance. The information technology is transforming the environment in which Librarians work and skills required to function the health care needs. The health care providers have access to required information to support decision making

II. Conclusion

Numerous studies demonstrate that librarians are capable of facilitating and engaging in informatics programs. Play a significant role in informatics education. Librarians have a combination of technological and human skills that provide opportunity for interdisciplinary collaboration in informatics. However, it is believed that because health care practitioners do not acknowledge librarians' services, their value has been devalued. The diagnosis, treatment, and prevention are the primary goal of health informatics.

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