

## The Role of Clinical Librarian in Improving Clinical Decision Making Process in Pediatric Intensive Care Unit in Tehran Children's Medical Hospital: An Action Research

Farzaneh Habibi\*

Fatemeh Sheikhshoei\*\*

Masoud Mohammad Pour\*\*\*

Seyed Javad Ghazi Mirsaeed\*\*\*\*

Parvaneh Modiramani\*\*\*\*\*

### Abstract

### Introduction

Due to the growth of information technology and the increasing number of medical information resources, the need for medical staff to search for and retrieve reliable and up-to-date information on the one hand and their time constraints on accessing these resources, on the other hand, this need has become one of the goals of physicians and health managers and the need for the clinical librarian has been felt as a link between the information world and the medical staff. This study try to investigate the role of clinical librarians in improving the clinical decision making process in pediatric intensive care unit at Children's Medical Center Hospital.

### Method

This research is a descriptive type and a qualitative approach in terms of purpose, and has been done by action research method. The study population consisted of 10 faculty members in the first phase and 14 members of faculty and assistants including Fellowship, Residency and Intensive Care Unit interns. In the first phase, the data were collected through interviews and later through questionnaires and

\* Department of Medical Library and Information Sciences, Tehran University of Medical Sciences, Tehran, Iran, habibi.farzane@gmail.com

\*\* Department of Medical Library and Information Sciences, Tehran University of Medical Sciences, Tehran, Iran, fashoei@sina.tums.ac.ir

\*\*\* Children's Medical Center (Hospital), Tehran University of Medical Sciences, Tehran, Iran, mmpour@gmail.com

\*\*\*\* Department of Medical Library and Information Sciences, Tehran University of Medical Sciences, Tehran, Iran, jghazi37@gmail.com

\*\*\*\*\* Central Library, Mashhad University of Medical Sciences, Mashhad, Iran, pmodiramani@gmail.com

observations. Data analysis was done through Excel software, tables, graphs, statistical indices, mean and standard deviation were used to describe the data.

## Results

According to Phase I findings, most physicians were unfamiliar with the term clinical librarian and recognized the areas of clinical librarian work in the areas of training, information in the clinical team, and research. The challenge of absence of clinical librarian in hospital, in their view they are: Lack of practical introduction of evidence-based medical topics to physicians and their proper use, updating physicians and student's information and implementation along with planning this topic. The second phase findings in the pre-training phase showed that the most used base of physicians in clinical decision making, Up to date and Pub med and the least was Trip database and Embase. Doctors were most aware of clinical guidelines and they were unaware of the format of the Pico Question, the Boolean Operators, and a variety of clinical questions. Their information on systematic review studies, meta-analysis and evidence were in relative and relative order and their information on systematic review studies, meta-analysis and evidence were in relative and relative order. Data collected after training sessions showed that physicians' information was increased in the area of evidence-based medicine and clinical librarianship and most of them agree with the role of the clinical librarian in saving information access time.

## Conclusion

By implementing the clinical librarian project and working with the treatment team, patients and staff will benefit. The presence of clinical librarians and the training sessions it holds will make the evidence-based medical culture more prevalent. The morning reports and training rounds will be run on an EBM basis and as a result its use has increased. Based on the findings of the study as well as the findings of the studies conducted it can be concluded that clinical librarian services in different fields can have a positive impact on physicians' information seeking behavior.

**Keywords:** Clinical Librarian, Evidence-Based Medicine, Clinical Decision Making, Action Research, Children's Medical Center Hospital, Pediatric Intensive Care Unit

## Bibliography

- Shearer BS, Seymour A, Capitani C. Bringing the best of medical librarianship to the patient team. J Med Libr Assoc. 2002 Jan; 90(1): 22-31.
- Sackett DL .Evidence-based medicine. Semin Perinatol: 1997; 21(1):3-5.
- Sheikhshoei F, Zolfaghari M, Mansourzadeh M, Ghazimirsaeid J. Designing a proposed educational program for clinical librarian. Journal of health administration. 2020; 22(4).[In Persian]

- Hashemian M, Zare Farashbandi F, Rahimi A, Adibi P, Yamani N. Clinical librarianship challenges in iran. *Journal of EAHIL*.2018; 14(2).
- Aletaha A. Investigating the role of librarian and clinical informants in improving the treatment process of patients in deprived and posthoc health centers: presentation of a remote librarian and clinical informer model [MS thesis]. Kerman: University of medical sciences; 2011. [In Persian]
- Khosravi A, Esfandiari A, Otaghi M. Identifying obstacles towards the role-playing of medical librarians in facilitating the scientific communication among physicians and paramedical practitioners based on the viewpoint of Bushehr medical professionals: A qualitative study. *Journal of Health Information Management*. 2018 Aug-Sep; 15(3): 132-138. [In Persian]
- Shokraneh F. The clinical librarian's answering steps to emergency medicine faculties' and residents' clinical questions in 7th tir martyrs hospital [MS thesis]. Tehran, Iran: Iran University of medical sciences; 2010. [In Persian]
- Ashrafi Rizi H, Hodhodinezhad N, Shahrzadi L, Soleymani M. A study on the novel services of medical librarians in health information services: a narrative review. *Journal of Health Information Management*. 2017 Feb-Mar; 13(6): 438-444. [In Persian]
- Hashemian M, Zare-Farashbandi F, Rahimi A, Adibi P, Yamani N. Clinical librarianship challenges in Iran. *J Eur Assoc Health Inf Libr*. 2018; 14(2): 23-26.
- Boykan R, Jacobson R. The role of librarians in teaching evidence-based medicine to pediatric residents: a survey of pediatric residency program directors. *J Med Libr Assoc*. 2017 Oct; 105(4): 355-360. DOI: <http://dx.doi.org/10.5195/jmla.2017.178>.
- Maggio L A, Durieux N, Tannery N H. Librarians in evidence-based medicine curricula: a qualitative study of librarian roles, training and desires for future development. *Med Ref Serv Q*. 2015; 34(4):428-40. DOI: <http://dx.doi.org/10.1080/02763869.2015.1082375>.
- Brassil E, Gunn B, Shenoy AM, Blanchard R. Unanswered clinical questions: a survey of specialists and primary care providers. *J Med Libr Assoc*. 2017 Jan; 105(1): 4-11. DOI: <http://dx.doi.org/10.5195/jmla.2017.101>
- Brette A, Maden M, Payne C. The impact of clinical librarian services on patient and health care organization. *Health Info Libr J*. 2016 Jun; 33(2):100-20. DOI: <http://dx.doi.org/10.1111/hir.12136>. Epub 2016 Feb 17.
- Perrier L, Farrell A, Ayala AP, Lightfoot D, Kenny T, Aaronson E, Allee N, Brigham T, Connor E, Constantinescu T, Muellnbach J, Brown Epstein H-A, Weiss A. Effects of librarian-provided services in healthcare settings; a systematic review. *J Am Med Inform Assoc*. Nov-Dec 2014; 21(6):1118-24. DOI: <http://dx.doi.org/10.1136/amiajnl-2014-002825>.
- Brian R, Orlov N, Werner D, Martin SK, Arora VM, Alkureishi M. Evaluating the impact of clinical librarians on clinical questions during inpatient rounds. *J Med Libr Assoc*. 2018 Apr; 106(2): 175-183. DOI: <http://dx.doi.org/10.5195/jmla.2018.254>