Meeting the increasing needs for differentiated health library support services in a large university hospital

Mette Brandt Eriksen¹, Janne Buck Christensen².

¹The University Library of Southern Denmark, 5230 Odense M, Denmark. ²Odense University Hospital, 5000 Odense C, Denmark.

Corresponding author: Mette Brandt Eriksen, <u>mette_e@bib.sdu.dk</u> (presenting author).

Introduction

The need for health library services developed to support students, researchers and clinical staff continuously undergoes changes (1-3). The importance of health libraries to meet the differentiated demands is vital, since the information literacy qualifications of the students, researchers and the clinical staff, has an impact on the quality of the conducted research and patient care (4).

The medical library (Videncentret) at Odense University Hospital (OUH) is the collaboration between the University Library of Southern Denmark and OUH, and supports clinical staff, students within the medical- and healthcare sciences and researchers.

Videncentret has in lately experienced a growing call for library specialist services, such as help with literature searching, reference handling and tools for conducting evidence-based medicine.

Strategy

To accommodate the different needs of the students, researchers and clinical staff, within a limited time and resource frame, the extent of library support services now offered depend on employment and academic level: researchers, clinical staff (in need fast and easy available information), PhD students and additional students. New services have been developed, encompassing introduction to literature search workshops, reference management training and customized department web pages with links to relevant information resources.

Results and achievements

The literature search workshops and reference management training to a large degree replaces the previous individual time consuming supervision, and are available for all regardless of academic level and offer thorough introductions combined with hands-on experience. Additional more costumized services are offered to researchers and clinical staff. The new initiatives were necessary to meet the increasing demands for literature search skills and reference management training, especially requested by individuals with little prior training in literature search and reference management.

Conclusion

Reorganizing the medical library support services to include general courses, have enabled us to assist more people, as well as delivering specific, customized and complex support and training often required by medical researchers.

Introduction

The services and roles of health libraries in medical education, daily clinical work and health research are of great importance, and aim to promote evidence-based medicine (EBM) in all aspects of medicine: from education to clinical practice and research. Health library services developed to support students, researchers and clinical staff must continuously undergo changes in order to support the work and development that health personnel and researchers face in their daily work (1-3). Meeting the ever-changing demands are necessary, not at least because the information science qualifications of both students, researchers and the clinical staff, have an impact on the quality of the conducted research and patient care (4).

Odense University Hospital is one of four university hospitals in Denmark and covers all the medical specialties. The number of PhD students has increased from 141 in 2009 to 269 in 2015, and the number of professors has more than tripled, increasing from 30 in 2009 to 94 in 2015. Since 2012 the hospital furthermore has established four elite research centers that focus on being on the top of the international research league within their research area.

Additionally, the number of peer reviewed publications has increased greatly from 561 in 2009 to 1203 in 2015 (5).

The medical library at the hospital is the close collaboration between the University Library of Southern Denmark and the hospital. The medical library supports clinical staff, students within the medical- and healthcare sciences and researchers. The increase in the number of researchers and research output / publications, indicate the increased call for differentiated health library services and support provided by the medical library. Particularly the cornerstone in EBM, the systematic review (6), has augmented the interest in and need for literature searching skills.

Among clinical staff, students and researchers, the call for improved literature searching skills (at both basic and systematic search levels), reference management training and fast and easy accessible medical literature, has led to changes in the organization of library support and services. Despite changes in the organization of support and services, the medical library focused on the aim to promote research conducted at hospital.

Strategy

In order to keep the library services and support updated, as well as balancing resources and the different needs of the students, researchers and clinical staff, organizing differentiated library support services was necessary. Previously, individual guidance in literature search of both pre- and postgraduate students (students other than PhD students), PhD students, researchers and clinical staff placed high demands on personnel resources. The reorganization means that the services and support that are offered depend on employment and academic level: researchers, clinical staff (in need of fast and easy available information), PhD students and students other than PhD students (Fig. 2 outlines this).

Methods

The new services developed, include: a). introduction to literature search workshops, b). reference management training and c). customized department web pages with links to relevant information resources.

a). Introduction to literature search workshops are one-hour training sessions available for all users regardless of employment and academic level. The training sessions are developed to train the attendees to search the most common health science databases (PubMed, Embase or CINAHL), provide them with a basic survey of subject headings, use of filters and how to save searches. Postgraduate students are offered brief individual guidance on literature searches in relation to their thesis. The literature search workshops are held one to two times a week, depending on demands and number of persons enrolled.

b). Reference management training includes one-hour training sessions available for all regardless of employment and academic level, in both Endnote and Covidence. Two Endnote training sessions are available: a basic training session, developed for beginners and thus focusing on introducing the most important functions in Endnote, and an extended course developed to increase the competencies of existing Endnote users. Endnote training sessions was initiated in 2013 and Covidence training is a recent initiative (February 2016), developed to support researchers doing systematic reviews. The Endnote training sessions are held every second week or more often if required. Covidence training sessions are held approximately once a month or more often if required.

c). Customized department web pages with links to most relevant information resources (Fig. 3). These customized webpages compile relevant resources in terms of journals, e-books and subject specialized resources e.g. Human Gene Mutation database (included on the Department of Clinical Genetics webpage). The department web pages are offered as a service for all of the departments at the hospital. The departments themselves have a great impact on the content of their content of the web page, and flexible solutions developed to meet the exact needs and requirements of the departments are provided. At some departments web pages a customized for personnel with different professions (e.g. nurses and medical doctors). Other departments have several customized web pages due to sub specialties within the department (e.g. Department of Clinical Pathology with sub specialties in skin or kidney pathology). The customized web pages are updated every half year.

Along with the abovementioned initiatives, even more specific services and initiatives such as customized extended literature search training sessions and systematic review courses for departments (initiated to offer an introduction to the concept and workflow of systematic reviews to clinical staff and researchers for whom a PhD course in systematic reviews is not relevant or possible) are offered.

Results and achievements

The reorganization of services and support with weekly literature search workshops and reference management training sessions, reduce the time consumption of the previous individual trainings sessions. The availability of these workshops and training sessions for all regardless of academic level, offer thorough introductions combined with hands-on experience. Such courses introduce a flexible offer on literature search and reference management introduction for all users. In 2015, when the literature search workshops were introduced, 202 attended these workshops. By the end of April 2016, 100 have attended the workshops. Previously, individual guidance would have been offered to these attendees.

Endnote training sessions were initiated in 2014 and the demand for these training sessions are indicated by the number of participants attending: 213 in 2013, 174 in 2014, 199 in 2015.

For postgraduate students doing their thesis, short individual guidance is offered in connection with their participation in a literature search workshop. One to one-and-a-half hour of individual guidance on literature search is offered for PhD students. These extended offers ensure a retained and specified support for those carrying out more detailed and systematic searches. However, some users which are not offered individual guidance may be lacking this, especially if carrying out systematic reviews. We have not yet carried out satisfactory surveys after the change in services and support.

A previous mentioned these new initiatives were necessary to meet the increased demands for literature search skills and reference management training guidance. The Faculty of Health Sciences at University of Southern Denmark, offer PhD courses in Literature Search Strategies and Systematic Reviews with staff from the medical library teaching and being wholly or partly responsible for these courses. Introducing Covidence training is in tune with a recently initiated PhD, which shortly introduces Covidence as a tool for systematic reviews. Together, the literature search workshops and reference management training offered in the medical library correlate to and fit the context of courses offered to PhD students (and others enrolled at PhD courses).

The customized web pages provide clinical staff, researchers and students at the departments with fast and focused information and thereby support their need for easy accessible information.

Conclusion

A flexible and updated portfolio of introduction courses offered along with customized services contributes to the aim of supporting and promoting EBM. Reorganizing the medical library support services to include general introduction courses, have enabled us to assist more users, as well as delivering specific, customized and complex support and training often required by medical researchers.

References

- 1. Crum JA, Cooper ID. Emerging roles for biomedical librarians: a survey of current practice, challenges, and changes. Journal of the Medical Library Association : JMLA. 2013;101(4):278-86.
- 2. King SB, Lapidus M. Metropolis revisited: the evolving role of librarians in informatics education for the health professions. Journal of the Medical Library Association : JMLA. 2015;103(1):14-8.
- 3. Aldrich AM, Schulte SJ. Establishing a new clinical informationist role in an academic health sciences center. Medical reference services quarterly. 2014;33(2):136-46.
- 4. Holst R, Funk CJ, Adams HS, Bandy M, Boss CM, Hill B, et al. Vital pathways for hospital librarians: present and future roles. Journal of the Medical Library Association : JMLA. 2009;97(4):285-92.
- 5. OUH. Odense University Hospital research output: <u>http://ouh.dk/wm381277</u>.
- 6. Masic I, Miokovic M, Muhamedagic B. Evidence based medicine new approaches and challenges. Acta informatica medica : AIM : journal of the Society for Medical Informatics of Bosnia & Herzegovina : casopis Drustva za medicinsku informatiku BiH. 2008;16(4):219-25.

Figure 1. The organization of library support and services based. The figure indicates the change in support and services, which is now based on employment and academic level.

	Literature search workshop	Reference management training	Literature search conducted by request	Customized literature search course	Individual supervision	Literature Search Strategies (PhD course)	Systematic reviews (PhD course)
Researchers at SDU / OUH	+	+	+	+	+	+	+
Clinical staff	+	+	+	+	+	(-)	(-)
PhD students	+	+	+	-	+	+	+
Students other than PhD students	+	+	-	-	-	-	-

Figure 2. Costumized department web page (Department of Clinical Genetics). The figure shows a truncated example of a customized web page.

Department of Clinical Genetics

News from Videncentret

Journals

- Acta Oncologica
- Annual Review of Genetics
- BMC Medical Genetics
- 🛛 ВМЈ
- Cell Stem Cell
- Clinical Dysmorphology
- Clinical Genetics
- Epigenetics & Chromatin
- Gene
- Genes & Cancer
- Genes & Development
- Genes to Cells
- Genetics
- Genome Research
- Genomics
- Human Genetics
- Human Molecular Genetics
- Human Mutation
- 🛛 JAMA
- Journal of Clinical Oncology
- Journal of Medical Genetics
- Journal of Neurogenetics
- Molecular Cytogenetics
- Molecular Oncology
- Nature Genetics
- NEJM
- PLoS Genetics
- PLoS Pathogens
- Prenatal Diagnosis

E-books

Abnormal Skeletal Phenotypes Springer, 2005

Cancer Epigenetics Springer, 2015

Cancer Genetics Springer, 2010

Epigenetic Epidemiology Springer, 2012

Epigenetics and Complex Traits Springer, 2013

Epigenetics and Human Reproduction Springer, 2011

Epigenetics of Lifestyle Bentham Science Publishers, 2012

Epigenetics Protocols Humana Press, 2011

Genetics New Age International, 2009

Patho-Epigenetics of Disease Springer, 2012

Stroke Genetics Springer, 2013

Toxicology and Epigenetics Wiley, 2012

Databases

Human Gene Mutation Database Log evt. ind med personlig bruger - ellers, klik på HGMD®

Winter-Baraitser Dysmorphology & Neurogenetics Database Kræver lokal installation på computeren - kontakt evt. David fra Videncentret