

Supporting the medical research and daily work at the hospital – analysing the library and information services at the Kuopio University Hospital

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Abstract

Finland is undergoing a health and social services reform. This reform will reshape the structure, services and funding of health and social services and establish new counties and transfer new duties to the counties. The aim is to provide people more equal services and even out population level differences in health and well-being, and to curb cost increases. This means a new type of operational environment for the university libraries acting in the hospitals. A survey was conducted at the Kuopio University Hospital to find out the needs of the users. It shows that both library collection resources and information services are needed by academic and hospital staff.

Key words: access to information; health care reform; information services; libraries; surveys and questionnaires.

Introduction

The medical practice in hospitals is built on research results, evidence-based methods and knowledge of centuries. This has been the basis for modern health practices in hospitals. The university hospitals are also a major actor in both academic teaching and research. This means that there is a need for academic level information services and library collections of current research publications to satisfy the specific needs of the academic and hospital staff. The modern information environment is digitising rapidly. This means that many services at the university libraries acting in hospitals are being outsourced to third-party actors; the most important being the digital collections and databases. These are managed via contracts that enable the academic use of the collection at the university hospitals. The publishers have an understanding for this type of use and this is evident in the pricing of, e.g. the e-journals. This is a win-win situation: the academic staff at the hospitals produce a majority of the publications that are used in developing hospital services and the new knowledge for the benefit of patients and healthcare globally. As working places, university hospitals are knowledge-dependent

learning organisations in a very classical sense. They need efficient and up-to-date resources and services. The vast amount of academic documented resources available and the time-critical operational work conducted at the hospitals mean that there is a need for library and information services that enable the staff to focus on their main tasks and save time in their information seeking and use. In addition, the self-service based digital databases require a good skill base to be able to conduct valid and useful searches. This has meant that the role of the teacher has become an integral part of the library and information services (1, 2).

The university hospitals and universities have been working together in Finland to facilitate the university hospitals with academic level information and library services. In many cases, the hospital libraries have in fact been the basis for the university library's medical collections (3).

Kuopio University Hospital (KUH) caters for the specialist medical care of the 248,000 citizens in its area. It also serves for the one million inhabitants in Eastern and Central Finland in cases that require highly specialised medical care. As one of the five university hospitals in Finland, KUH provides high-

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quality care in all medical specialties, conducts internationally renowned research, and trains the top experts of the future (4).

University of Eastern Finland (UEF) is a multidisciplinary university that offers teaching in more than 100 major subjects in four faculties: the Philosophical Faculty, the Faculty of Science and Forestry, the Faculty of Health Sciences, and the Faculty of Social Sciences and Business Studies. The UEF Library is a public academic library offering library and information services especially for the university's 3,000 staff members and 13,000 students. However, the library is also open to everyone else who is seeking information. The UEF Library is one single administrative entity comprising the campus libraries in Joensuu, Kuopio and Savonlinna, and the KUH Medical Library – a joint library of KUH and UEF (5, 6).

There has been a university reform in Finland from the 2010 onwards. At present, the healthcare legislation is being renewed. Both of these policy developments have started to bring in new public management types of managerial and ownership issues into the academic environment (7). This may have severe consequences especially for the academic use of digital resources, if there is an effort to economise by outsourcing the academic work or working environment to a business-like environment.

We decided to conduct a survey-based research that tries to answer to the following questions:

- 1) What type of information is needed and what services are used at the Kuopio University Hospital?
- 2) Is there a difference between the use and needs of the academic and hospital staff?

The authors are from both the hospital research administration and the university library, since both needed information to develop our services and inform the policy makers. In the following, we describe our research and its results and make some conclusions based on them.

Methods

Data collection

The data for the study was gathered by survey carried out with the E-lomake software. The questionnaire (in Finnish) was published in the

internal website of KUH, and anyone who had the access to the intranet was able to answer.

The main theme in the questionnaire was the usage of the library services. The services were categorised into collections, research and publishing support services, personal services, teaching services and guidelines. In addition, the use of library space and equipment as well as acquisition services were asked about. The respondents answered the questions by choosing the appropriate option. The options of the structured part of the questionnaire were “Yes, now”, “Yes, now and in the future”, “Yes, in the future”, “Not now nor in the future”, “Cannot say”. There was also an unstructured part with open-ended questions about the use of services now and needs in the future. As background information the affiliations and position or title of the respondent were asked. *Table 1* presents the structured questions of the survey.

Do you use library collections?	Books (printed and electronic) Journals (printed and electronic) Databases Remote access to electronic collections
	Interlibrary loans, copies Requesting articles and loans from the National Repository Library Legal deposit collection
Do you use library's research and publishing s	Reference management Bibliometric services Research evaluation tools Repositories and research information systems Other services related to publishing
Do you use library's personal services?	Customer services/reference services (in library, by phone, email, Skype, chat) Guidance (information specialist services by appointment)
	Information services (commissioned services, reference lists) Library material delivery to office
Do you use library's teaching services and guid	Information skills afternoons RefWorks afternoons Teaching booked for own unit (à la carte selection) Online training services on varied topics (Skype for Business, Adobe Connect) Distance learning courses (Moodle) Information skills teaching integrated to certain in-house training Database guides and instructions (written, videos)
Do you use library space and equipment?	Library computers Library WIFI (own laptop) Groupwork spaces Silent reading space Other library space or equipment
Do you use library's acquisition services?	Ordering/buying books to unit's reference library Subscribing journals to unit's reference library Ordering/buying other types of material to unit

Table 1. Survey questions.

Data analysis

Within the open-ended questions, the data were analysed both qualitatively and quantitatively according to themes: database, information specialist services, teaching and guidelines, remote access, space and equipment and acquisition services. The data were analysed using thematic content analysis and the answers were grouped. The concepts with similar content were combined to form upper concepts. Data were presented both as quotes to show the meaning that participants gave to the theme in question and in some cases also quantitatively to show how many shared the same view. The statements were read by AH and meaningful concepts and information were grouped under the selected themes. If a theme was addressed even in one sentence, this was included as a statement within the theme. The research group also worked together in reviewing the conceptualisation process and the selected concepts by confirming the validity of the study (8-10).

Statistical analyses

Numerical variables from the survey were reclassified by TS into four groups "Cannot say", "Not now nor in the future", "Yes, now" and "Yes, now and in the future" where the choices "Yes, now and in the future", "Yes, in the future" were combined. These variables were expressed as median or frequencies with percentages from all data and both study groups. Median was calculated from choices "Not now nor in the future" to "Yes in the future", excluding the choice "Cannot say". Group differences were tested by Fisher's exact test. P-values <0.05 were set to indicate statistically significant results. All analyses were executed by R statistical software version 3.1.1.

Results

There were 184 responses. 138 of the respondents were only KUH staff members, and 29 persons were both KUH and UEF staff members or students, while only four had solely UEF affiliation. In all, 45 respondents identified themselves as clinicians, 43 as researchers, 19 as students and seven as other.

Structured questions

The results inside each of the question groups do not usually differ. If the respondents use one of the

services in a group, they seem to use the others, too. For example, among the personal services, half of the respondents use guidance (information specialist services by appointment), information services (commissioned services, reference lists) and library material delivery to office now and in the future.

There are not any significant differences between the respondent types in the use of most of the services. The ones that show a clear difference – remote access to electronic collections, bibliometric services and customer services/reference services – are shown in *Figures 1, 2 and 3*. They also show that the remote access and customer/reference services are used almost by all the respondents while more than half of them do not use or know bibliometric services. As the respondents represent all hospital staff, not only researchers, this is understandable.

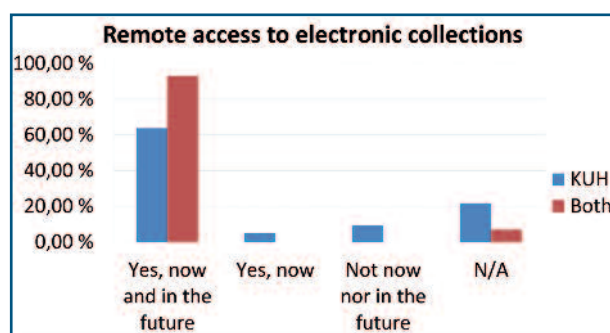


Fig. 1. Remote access to electronic collections.

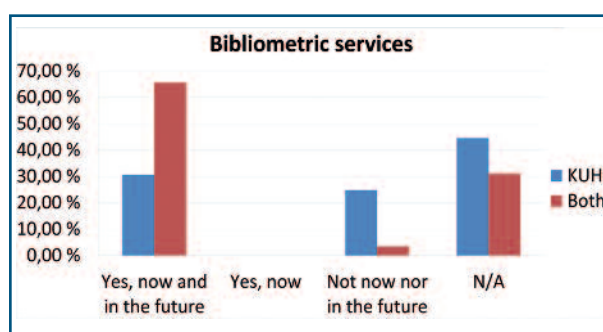


Fig. 2. Bibliometric services.

Figures 4 and 5 show almost identical numbers for the library's teaching services and guidelines and the library space and equipment. While more than a third of the respondents are current and future users, a quarter or almost a quarter is not interested

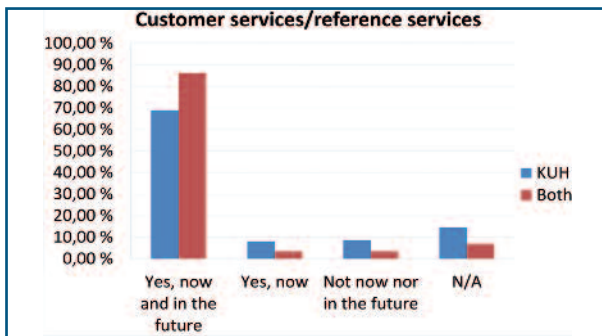


Fig. 3. Customer services/reference services.

in these services, a significant number (close to half of them on teaching and guidelines) cannot say – either because they are not aware of these services or not interested in them. We cannot explain this gap by the respondents being only hospital staff members but must take a closer look at marketing these services to all potential users.

The acquisition services are the most unknown group of these services. Most of the respondents did not seem to have any knowledge about this kind of services to their units.

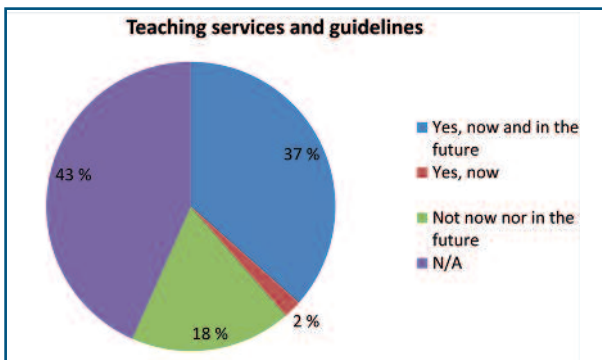


Fig. 4. Teaching services and guidelines.

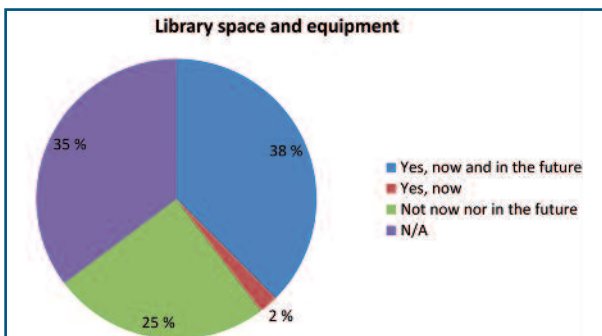


Fig. 5. Library space and equipment.

Unstructured questions

The replies to the open-ended questions about which services the respondents use now, focus on collections. Books (printed and e-books) got 62 mentions. They have a big role in continuous professional development. In addition, journals (electronic and printed) are important with 53 mentions. The use of different databases was mentioned 35 times. Remote access to electronic resources was mentioned 30 times without specifying if databases, journals, e-books or all of them were accessed remotely. Information specialist services were also popular and mentioned 43 times, while lending and reference desk services got 26 mentions. Acquisition services got mentions, too. Twelve respondents mentioned training services. According to these unstructured responses, many of the respondents use the library space for studying and group-work (17 mentions) and they use the library work stations and printers, as well (15 mentions). Some respondents did not specify the services but responded all services (3) and collections (5). Seventeen said they do not use the library.

The replies to the open-ended questions about which services would be used in the future indicate that the respondents are satisfied with the current services and would use them also in the future (15). Personal services related to information retrieval (13) and information skills training (12) were most commonly mentioned. The respondents stressed the importance of expertise in customer services (6). They listed avoiding predatory publishers and reference management as training topics. Twelve of them mentioned the importance of remote access also in the future. Databases (6), articles (4), books (9), and library space (4) also got some mentions.

The third unstructured question was the most open-ended one, asking if the respondents would like to say anything else about the library services. They appreciated the competence of the staff and the friendliness of the customer services. They were thankful for the smooth processes, especially the logistics and delivery services between the library units (11). Though they considered remote access necessary, they also hoped that the local service in the hospital would remain. They regarded library

services important for professional development. The quotes are translated from Finnish.

"Library definitely has to remain at KUH! Important for professional development."

In addition, the respondents brought forward that a university hospital must have a research library that supports the clinical research conducted in the hospital.

"The library services at the KUH Medical Library are excellent. The service is good and prompt. A university hospital has to have its own research library."

Among the services, the respondents valued especially teaching, and wanted targeted information skills training to support research. They would also like to develop the space and equipment, for example, by adding computers.

"I consider it extremely important that [the services] remain and evolve. Also, the physical library is needed (not only virtual)."

The survey also suggests that the library must communicate more actively. Some of the respondents were not aware of all library services; some found it hard to find them on the library website and the hospital intranet. For example, Quesenberry *et al.* (12) have raised the question on how to increase awareness of the library services in order to make them an integral part of the scholarly process. Additionally, they emphasise the need to implement strategies to streamline access to online resources and providing instruction in preferred formats (12).

Lack of time and busy work shifts are the main obstacles of using the library. One respondent described their situation at the time of the survey:

"I have not had a chance to get to know the services and the collections. During working hours there is no time to acquaint myself with the library tips presented in the hospital intranet."

The fact that this person has apparently at least noticed the regular "library tip of the week" bulletins can be considered as an encouraging feature in their situation.

Conclusions

"It is crucial that the library can communicate actively about its collections and services. This is not solely an information dissemination or marketing issue, but involves aligning with hospital priorities, seeking out supporters and forging partnerships to enhance integration" (13). Some of the questions in the survey turned out to be more useful as marketing tools, providing information of the services that are less used or unheard of, than as data about the usage of those services. The data collected here provides material also for the lobbying of the need for academic level library and information services at the (university) hospitals. This is crucial when planning the services for the renewed health care policies in Finland.

Our hypothesis that both the academic and hospital staff need library and information resources and services was proven correct. A good and up-to-date digital collection is what the users are looking for. We thought that there would have been more differences in the information services usage, but it was found that also the information services, e.g. bibliometrics, reference and teaching – even the library space, were widely used.

As a conclusion, we can say that hospitals that also conduct research have created an information culture that is quite similar to all the people working at the hospitals, regardless of the type of work a person does. The different practices are based on research and documented evidence. This means that a hospital has a need for professional level academic library and information services and cannot rely only on digital resources on a self-service basis.

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