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Assessing the "Hyvis" Enquiry Service by Applying the Process Model of Information Management

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Abstract

Internet-based services in the field of health care are one potential response to technological development. Nowadays people of different ages use the Internet to seek health-related information. The aim of this study was to assess how well the "Hyvis" Enquiry Service fulfils users' information needs, and also how the Hyvis Enquiry Service impacts on the use of health care services, by applying Choo`s Process Model of Information Management. A qualitative approach was used and the data were collected using semi-structured interviews (n=14). The results of this study show that in the view of both health care professionals and users, the Enquiry Service fulfils users´ needs, and that users usually obtain the specific information they require for the problem they have. Further, health care professionals believe that the information is accurate for the answer and is filtered by a health care professional before delivering the information to the users. These were also the expectations of the users who decided on using the Enquiry Service.

Keywords:

delivery of health care, internet, consumer participation

Introduction

The number of Internet users in Finland has been growing rapidly, and people of different ages increasingly use Internet services in their daily life. As use of the Internet has become more popular among health care users, the Internet has also had an effect on the delivery of health care services. According to Åkesson et al. technical interventions provide the users with support, help and information. Although information and communication technology can enhance the nurse – patient relationship, it cannot entirely replace it. [1] The traditional 'office visit' model used in health care fails to meet clients´ heterogeneous needs. Nowadays, services should be delivered by offering multiple entry paths into health care services. [2] Consequently, new ways of accessing health services and information should be introduced.

Internet-based services, such as the "Hyvis" portal, are relevant options. The Hyvis portal is a free Internet-based service, intended for inhabitants of the Etelä-Savo Hospital District, that complements regional health services and promotes the welfare of inhabitants by offering information about health and health care services. An enquiry service for users to consult a health care professional is included in the portal. Questions can be presented either in the portal's public forum, allowing universal access to the information, or in a private forum access to which is secure and only the person who asks the question can read the answer. Clients usually, receive their answer within one or two days. [3]

The process model of information management

The process model of information management is a continuous cycle of six closely related activities: identification of information needs, information acquisition, information organization and storage, development of information products and services, information distribution and information use. [4]

The aim of this study was to assess how well the Hyvis Enquiry Service fulfils users' information needs and also how the Hyvis Enquiry Service impacts on the use of health care services, by applying Choo`s information management model.

Methods

This study employed a qualitative approach. The data were collected through semi-structured interviews. Five users of the Hyvis Enquiry Service and all the nine health care professionals who answer users' questions via the Internet were interviewed for this study. Six of the interviews were carried out by telephone. The users of this service were requested to participate in the study by advertising the study on the front page of the Hyvis portal. All the interviews were tape-recorded, and the researcher also took notes. The interviews were typed up and the data analysed by using inductive content analysis. [5]

Results

The results of this study will be presented in the order followed in the Information Management Model applied.

Information needs

The users of the service expect to obtain reliable information filtered by a health care professional. Frequently asked questions are problem-based questions relating to

health, diseases or the health care services. Also, self-care for a specific disease is often enquired about. Typically, the information is needed to support users' decision-making processes.

Answers given by health care professionals are based on the information given in the question. Sometimes the user fails to give enough background information, or the question is very wide and general. In such cases it is almost impossible to give a specific answer in writing. For that reason part of the users and the health care professionals thought that structured questionnaire might be helpful in formulating a question.

Information acquisition

All health care professionals use electronic databases for seeking information. The most widely used database is a portal called 'Terveysportti' [Health portal]. Interviewed professionals also mentioned evidence-based recommendations as a means of applying information. In addition, health care professionals use their own experience and tacit knowledge in formulating the answer to the users´ enquiries.

Users of the service initially search for health-related information by using search engines such as Google. Three interviewees mentioned that they seek information from reliable Internet pages such as the Hyvis portal. In seeking information, users and health care professionals use different primary sources, but according to the health care professionals, users may still find the same information on the Internet. However, the selection of accurate information and sources, and also the application of the information to the user's own situation, are problematic without the relevant experience and education.

Information use

In this study, four of the five users obtained the required information. Although users trust the information received from the Enquiry Service, and most of the users received assistance with their problems, more specific answers were desired. At present, some of the answers are presented too generally, and the information offered in the answer would have been easily available from other sources. However, most users felt that they had been given the answers to their questions, and that the enquiry service helped users to make decisions about whether to visit a doctor immediately or to treat themselves.

Adaptive behaviour of the users

At present, the Enquiry Service complements health care services by offering easily available health-related information, but does not substantially reduce the use of health care services. Even through the service offers useful information to the users, some of the five interviewees contacted the health care call-centre or health care organization to make an appointment because self-care failed to bring relief. Both users and health care professionals are of the opinion that the Enquiry Service has a positive effect on users' self-care habits, and assists users to take care of their health. According to the users, the information received from the Enquiry Service has enhanced their knowledge of health and disease.

Conclusions

The results of this study suggest that the Hyvis Enquiry Service benefits some inhabitants and that users usually obtain the information they need. According to Choo´s applied information management model, identification of information needs is vital, as information needs form the basis for information acquisition. When communication between inhabitants and professionals is based on typed text, there also exist certain threats with respect to the identification of users' health-related needs. Firstly, health care professionals can interpret questions in a different way from what was intended, which leads to the user not receiving the information required. Secondly, users sometimes fail to supply all the necessary background information which should be taken into account in the answer. Accordingly, the information in the answer may be inappropriate, and the user still needs to contact the health services by telephone and make an appointment. For users who need less urgent help and do not want to spend time in a telephone queue, this will be a useful service model in the future providing that the problems concerning the identification of information needs are solved. According to this study, one option for the future could be structured questionnaires, which would help users to formulate their questions.

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