

Taking health information behaviour into account in user- centered design of e-health services - findings from an ongoing research project

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1 Introduction

This poster presents key findings from ongoing work within the Finnish research project “Taking Health Information Behavior into Account: implications of a neglected element for successful implementation of consumer health technologies on older adults“, funded by the Academy of Finland (2015-2020). There is a need for patients’ involvement and for the content of e-health services to be more consumer-focused. Individuals interaction with health information and their capacities to do so (i.e., health information literacy) could be used for tailoring health communication and as a basis for personalized and user-centered system design. The project aims at giving foundations for development of e-health services that are comprehensible, manageable, meaningful, and user friendly.

2 Methods

In the project both quantitative and qualitative methods, including postal and web surveys and focus group interviews have been utilized, and a systematic literature review has been carried out. Furthermore, a large population-based survey among older adults has been conducted at June 2019.

3 Results

According to the systematic review conducted, e-health research tends to focus on system usability rather than the usefulness, purposes, benefits, or value of eHealth services to their users. Overall, heterogeneous body of research exists on older adults’ views on e-health services. Common themes found could be identified: e-health service uses,

enablers and barriers, and outcomes. Moreover, the methodological approach of the study was associated with the type of findings reported, and there seems to be a positivity bias particularly in quantitative studies. [1]

Older adults' preferences and motivation of ordering a copy of their medical record, and using medical records -based e-health and information services in the future, have been studied in this project (see e.g., [2]). In addition, a focus-group study on views of users of the Finnish patient-accessible electronic health record My Kanta, showed, e.g., that concerns and barriers relating to use were socio-techno-informational and tightly associated with the contents of the system. Improved security, usability and additional information and functions might increase use. Coherent and timely information from health care providers should be available in the e-health services.

Health information literacy and technology use across age groups has been compared with several quantitative surveys. To summarize, older adults tend to value health information but have trouble understanding health terminology. Health information literacy is not necessarily improving or declining by age, but adapting to the challenges of advanced age. Older adults with negative attitudes towards and having less experience with mobile information technology seem to be likely to have poor self-estimated health information literacy skills [3].

A survey of online diabetes risk test users showed, e.g., that the respondents' general health information-seeking style was strongly linked to their health-promoting behavior when the test showed an elevated risk of type 2 diabetes.

The research group has also taken part in the discussion on how to support interdisciplinary dialogue between information behavior research and systems and service design [4].

4 Discussion

The project takes a holistic view on e-health and its use and users and points out that the information behavior of human beings, technology, and the socioeconomic environment are all connected to each other. The results can inform research within the field of health information behavior and e-health, but also other subjects such as human-computer interaction, medical informatics, public health or computer science. On the practical level the project provides information on user behavior and practices, as well as the actual utility value of the studied e-health services and the results can be useful for both improving existing services and for the development of new ones.

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