eHEALTH LITERACY AND INTERNET USE FOR HEALTH INFORMATION

A study in Swedish primary healthcare

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Akademisk avhandling

som med vederbörligt tillstånd av Rektor vid Umeå universitet för avläggande av filosofie doktorsexamen framläggs till offentligt försvaret i Aula Biologica, Biologihuset, fredagen den 12 januari, kl. 09:00.

Avhandlingen kommer att försvaras på svenska.

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Abstract

Background: Primary healthcare (PHC) faces significant challenges in Sweden and worldwide. One way to address such challenges is through health-related Internet information (HRII) and other eHealth services, which can assist in improving individual health. eHealth services can increase patients´ knowledge and engagement in self-management. However, patients must have adequate capabilities – collectively known as eHealth literacy (eHL) – to use eHealth services effectively.

Aim: To explore patients´ eHL and HRII use in the context of Swedish PHC.

Methods: In paper I, data was collected through individual interviews with primary healthcare nurses (PHNs), which were then analysed using qualitative content analysis. Paper II involved patients with type 2 diabetes who were interviewed individually or responded to open-ended survey questions; the data were analysed using thematic analysis. In paper III, the data consisted of cognitive interviews and questionnaires predominantly answered by PHC visitors, where psychometric analysis methods were used. Paper IV analysed data from PHC visitors using descriptive and comparative statistics and logistic regression analysis.

Results: Although the interviewed PHNs recognised the benefits of Internet-informed patients, their responses focused on the challenges they encountered. These challenges included patient confusion and unwarranted anxiety stemming from HRII, as well as conflicted and time-consuming healthcare consultations (I). Patients with type 2 diabetes outlined their challenges associated with online COVID-19 information, which encompassed information overload, conflicting content and notable emotional impact. Coping strategies to address these challenges included restricting their information consumption, relying on authoritative sources, actively evaluating source credibility, and applying common sense (II). The eHealth Literacy Questionnaire (eHLQ) was translated and culturally adapted to assess eHL in a Swedish context. The Swedish version of the eHLQ was found to demonstrate robust psychometric properties (III). Among the PHC visitors, being older than 60 years was associated with lower eHL in several eHLQ domains, including motivation and ability to use HRII and digital technology. In addition, older age groups reported that eHealth services did not suit their individual needs. The perception that HRII was not useful or important was also independently associated with lower eHL across several domains (IV).

Conclusion: The patients and PHNs in this thesis encountered challenges related to patients’ acquisition of HRII and utilising eHealth services. An imperative for healthcare professionals and authorities should be facilitating patients’ eHealth service usage. Healthcare authorities and eHealth developers should increasingly involve end-users in the development of eHealth services and provide opportunities for customisation based on individual needs.