Listening to the patients

Using participatory design in the development of a cardiac telerehabilitation web portal

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Cardiac diseases is the leading cause of deaths worldwide [1]. Cardiac rehabilitation requires patients to make both short- and long-term lifestyle changes. [2]. One solution for giving patients a better opportunity to change behavior may be personalized rehabilitation programs that use interactive telerehabilitation or eHealth web portals that can facilitate patient education. Several studies indicate that eHealth systems to be successfully implemented, the end-users’ needs and concerns need to be taken into consideration. [3,4,5]. In our view, the chances of operational success are greater by employing a patient-centered and participatory design (PD) in the design and development process. [3,4,5]

**Aim**

The aim of this study was to evaluate the design and usability of a cardiac telerehabilitation web portal called the “HeartPortal”.

**Method**

**Phase I: Development of ideas**

Method: Needs assessment and idea generation

- Aim: To evaluate the structure and user-friendliness of the “HeartPortal”.
- Method: Questionnaire survey and tasks assignments on: Use of technology; Experience of user-friendliness; Structure of the HeartPortal.
- Time: November 2015 to June 2016

**Phase II: Evaluation of design and structure**

Method: Questionnaires comparable to phase II with additional questions regarding data presentation and interpretation of graphical illustrations. Time: February 2017

**Phase III: Testing usability**

Method: To test the usability of the interactive information site and the health monitoring and activity tracking module of the HeartPortal

**User Evaluation**

The user evaluations were done through questions with heart failure patients and healthcare professionals.

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A total of 60% of patients reported that it was ‘very easy’ to navigate on the HeartPortal, 80% ‘strongly agreed’ that the information was understandable, and 60% ‘strongly agreed’ that the web portal had a logical structure. The results from the health care professionals were almost identical: 80% of the health care professionals reported that the portal was ‘very easy’ to navigate on the web portal, 60% found the information understandable, and 80% reported that the HeartPortal had a logical structure.

**References**


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