Listening to the patients
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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"

METHODS

Phase I: Development of ideas

Aim: Needs assessment and idea generation
Method: 8 workshops with heart failure patients, relatives, heart care professionals, health technology companies, and researchers
Time: November 2015 to June 2016

Phase II: Evaluation of design and structure

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: December 2016

Phase III: Testing usability

Aim: To test the usability of the interactive information site and the health monitoring and activity-tracking module of the HeartPortal
Method: Questionnaires comparable to phase II with additional questions regarding data presentation and interpretation of graphical illustrations
Time: February 2017

RESULTS

Usability of the HeartPortal

All participants felt comfortable using the HeartPortal. All agreed that the portal was easy to use, understandable, relevant for the disease, and comprehensive.

The majority of the participants felt that being updated about their activities through the tracking devices could help to improve their health condition. Our findings show that HF patients, their relatives, and HCP had an overall positive experience of the web portal and that end-users’ needs and ideas have been integrated into the portal.

CONCLUSION

Based upon a PD process, an interactive HeartPortal for the use in a telerehabilitation program for HF patients has been designed and developed.
Evaluation of the portal by patients and HCP shows the design and structure of the HeartPortal to be logical and easy to navigate. The study shows the absolute importance of PD in developing web-based technologies for patient users.

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REFERENCES