



Designing patient education with distance learning

A design-based study on the needs and requirements of type 2 diabetes patients for an online learning platform

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Abstract

Background: Self-management is crucial among patients with diabetes. Increasing the levels of self-management may prevent patients from developing further complications related to their disease. Tailoring education to the patient needs, and providing them with follow-up education on the various topics of diabetes could significantly improve patient understanding. The inclusion of distance learning, and especially Massive Open Online Courses (MOOC), in diabetes education has not been significant though. What topics should a distance-learning platform focus on when offering patient education to type 2 diabetics? How do patients perceive such a platform? And what education method should be used to better reach patient understanding, ultimately helping diabetics to reach better self-management?

Objective: Describing the needs and requirements of type 2 diabetics for the development of an online learning platform. The study tried to analyse what topics patients need follow-up education on to reach better self-management and how. The study wants to get an answer where patients would use a knowledge-driven decision support method inside the patient centric learning model.

Methods: A qualitative approach for this study included 6 participants, aged 30 to 65 years old. They were diagnosed with type 2 diabetes not earlier than 6 months before the start of this study and had no further diabetes related complications. They participated in an interview on the several topics related to diabetes, which identified where the need and requirements for education in is at. To help identify which topics patients wanted to receive follow-up education on the Diabetes Self-Management education (DSME) was used. The interview contained structured and unstructured questions, and was performed with a high level of involvement to provide relevant information related to diabetes throughout the interview.

Results:

Participants welcomed the idea of receiving education via an online learning platform. The incorporation of multimedia was highly recommended, and the method of receiving education was recommended to change per subject, not per topic. Overall, patient-centric learning was a preferred method in all topics, but knowledge-driven decision support was welcomed as an addition to some of the subjects.

Conclusion:

The current education offered is limited to providing basic understanding of performing self-management. Participants felt the need for follow-up education, but could not be provided with this. The proposed platform, with possibilities to access information whenever the patients needed, was seen as a welcomed addition to the current education offered in the different setups. Using patient-centric learning, combined with the integration of knowledge-driven decision support, could provide education and information whenever needed and benefit in increasing self-management levels among diabetics.

Keywords: Decision support; Diabetes Mellitus, Type 2; Self-care; Education; Self-Management