

Eliciting user requirements to design a prediabetes self-care application: a focus group study with prediabetics and diabetics

ABSTRACT

Objective: To explore the users' insights that contribute to behaviour change in prediabetics and the user requirements for a self-care application from the prediabetics' perspective. **Methods/Statistical Analysis:** We conducted Focus Group Discussions (FGD) on four distinct groups of diabetics and prediabetics at a Diabetes Resource Centre and among the public through advertisement. Open-ended questions were asked to stimulate the discussions. Transcripts of each discussion session were read several times, coded, categorised and analysed thoroughly by identifying the themes. The facial expressions during the discussion were also observed and taken into consideration. **Findings:** Results indicated that diabetes can be prevented through proper lifestyle changes, if and only if the person is willing to change his/her behaviour. The idea of a self-care application was well accepted by the participants and the components to be included were identified. The identified components are such as self-monitoring, diet, exercise, activity planning, goal setting, forum, social support and reminders. As for diabetics, taking medication has second highest priority where else it holds lesser priority among prediabetics. About 20% of the participants showed less interest in a self-care application either because they are not technology savvy or because of their advanced age status. **Application/Improvements:** A framework for designing prediabetes self-care application will be formulated, which integrates behavioural change theories.

Keyword: Behavioural change; Blood glucose; Diabetes prevention; Mobile application; Prediabetes; Web technology