2. Predictors of Patient Satisfaction with Computer-assisted Education (CO-ED) System at Psychiatric Rehabilitation Centers
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Background:
Patients with psychiatric condition have a higher incidence of smoking than the general population. Smoking cessation treatment in this group of patients is often challenging. Community psychiatric rehabilitation centers provide a several services ranging from rehabilitation assessment to pre-vocational employment training. Mobile computer-assisted education (CO-ED) system was developed on a touch screen tablet computer with hazards of smoking curriculum. This study was conducted to evaluate the predictors of patient satisfaction with CO-ED system at psychiatric rehabilitation centers.

Methods:
Current smokers were recruited from four different rehabilitation centers. A research assistant provided a training session on how to use the self-paced CO-ED module. Each screen displayed a brief educational message followed by a review question. Each patient used it for 30-45 minutes. Participants completed a set of surveys about demographic information, previous experience with computer, and knowledge test before and after using the CO-ED system. Further, a linear regression model was performed to assess the predictors of satisfaction with CO-ED experience. The linear regression model included predictor variables like pre-test knowledge score, age, gender, working status, computer use at home, race, years of education, and English level. The patient satisfaction was measured by Attitudinal Survey score (higher the score, more satisfied with the CO-ED system).

Results:
A total of 51 patients participated in the study. The mean age was 46 years old. 49% were men, 65% did not have a full time job and 35% never used the computer before. In average they smoked 14 cigarettes on daily basis. In the linear regression model, we observed that as pre-test knowledge increase one point, the Attitudinal Survey score was also expected to be higher by 0.5 points. For those who used computer at home once a week or once a day, the predicted Attitudinal Survey score would be 3.9 points higher than those who never used it before. The years of education also showed a positive relation with Attitudinal Survey score that the score increased by 0.9 points with one year increase in Education.

Conclusion:
The CO-ED system was well accepted by the smokers attending the psychiatric rehabilitation centers. The three predictors, pre-test knowledge, computer use at home, and higher education, were significantly associated with patient satisfaction with CO-ED system.