



## Service Priorities and Programmes Electronic Presentations

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### **Apps Your Health: CyberMedicine Improves Exercise Habit for Patients with Type-1 DM**

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#### **Introduction**

Developing conscious health promoting behaviours is vital for the ill-health management for patients with Type-1 DM. How to promote the habits of regular exercise and self-regulated diet is thus a challenge to health care professionals. The idea drawn from health psychology on goal settings and behavioural intervention on regular reminders was implemented into a one-year weekly online questionnaire that could be filled on computers or cell phones. It is aimed that in addition to psychoeducation sessions and regular OPD follow-ups, such measures could provide a more individualized regime for patients to reflect and to attune their personal health goals regularly, and thus enhance health outcomes.

#### **Objectives**

1. To improve health promoting behaviours
2. To improve health indexes

#### **Methodology**

6 groups of DM patients were divided into treatment group (n=41) and treatment-as-usual control (n=37), with comparable demographic background and health conditions. The treatment group would have an engagement/briefing session and after that weekly receive a link for a goal review questionnaire consisting of 7 items targeting their commitment to exercise and diet goals. The behavioural outcomes are measured by questionnaires and their health indexes were referenced to CMS records. A 2 x 2 within-subject ANOVA was used to analyze the data and interaction of group x time was used to indicate treatment-specific effect.

#### **Result**

It is found that in the half-year review, treatment group showed improvement in their commitment to diet and exercise although it did not reach statistical significance. The time spent in exercise weekly had a net increase of 39.5% or on average increased by

1.04 hour/week. Improvement in BP diastolic was found ( $p < .01$ ). Time effect of overall drop in importance of exercise rating ( $p < .05$ ), BP systolic ( $p < .05$ ), and body weight ( $p < .05$ ) was also noted. The preliminary result suggested that the weekly buzzing led to behavioural change with some impact on measured indexes.