

# The impact of Information and Communication Technologies - ICT in health promotion: an experiment with diabetes type 2 patients

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## Abstract and objective

*We developed a web platform to provide educational materials on diabetes for patients with diabetes type 2 and also to offer the possibility to interact with experts and other patients during 4 months. Patients were selected from health maintenance organizations HMO institutions in Montevideo, and after a survey about habits and knowledge about their condition, they were invited to a workshop to be introduced to the platform. Preliminary results show particular interest in nutrition subjects and passive participation.*

### Keywords:

Health promotion, Health education, Information technology, Secondary prevention, Diabetes Mellitus Type 2

## Introduction

Diabetes type 2 is a widespread chronic disease in Uruguay affecting 8 % of the population. Its care requires constant follow-up from the head physician and patient's self control. Information of good quality is of paramount importance for an effective control of this condition.

Other studies have shown the influence of internet based information for patients and their families not only to satisfy curiosity but also to discuss their condition with their doctors and share decisions and to guide their daily activities.

## Material and methods

Patients with diabetes type 2 receiving health care at HMOs in Montevideo were included if they had a diabetes type 2 no

insulin dependent, were not pregnant or in dialysis treatment and used internet at home.

A survey was performed at health institution to gather information about: use of internet, health status and severity of disease, disease management, use of health care services, compliance to treatment and sociodemographic characteristics. A web platform using Moodle was prepared with information and/or access to information about diabetes, forum, wiki and chat. All materials were selected by experts in diabetes and web searching. Patients were invited to participate in a two-hour workshop to be introduced to the platform and to learn how to use it. Patients who did not participate in workshops were invited by telephone call. New data were included at the platform on a weekly basis and patients were notified either by email or by cell phone instant messages. At the end of online phase, the survey will be carried out again to compare results pre and post intervention.

## Results

Intervention is still in progress, so final results are still not available. Preliminary data show that during the first three months of follow up, 84 out of 193, had at least three accesses to the portal. Their activities are mostly passive (49), with minor proportion of active roles (35) including chats and wiki with low interaction patient-patient and patient-experts. Twenty to 30 patients enter to the platform weekly. More than 20 patients had no entrance in the last 30 days, which shows the difficulty to maintain the interest in this population. Specially interested is shown to nutrition related subjects.