

Title of Intervention: Diabeto: a computer-assisted diet education system

Intervention Strategies: Individual Education

Purpose of the Intervention: To help patients with diabetes self-monitor their diets and balance their meals with personalized counseling

Population: Adults with diabetes

Setting: Patients with diabetes living within 150 kilometer radius of Toulouse, France; home-based

Partners: Telephone companies, medical clinics

Intervention Description:

- Individual Education: Patients were supplied an individualized computer-assisted education and information system, called Videotex, with free access from their home. The system had built-in options for energy requirement calculations, individualized meal analysis, specially-adapted menus, recipes, general dietary information and electronic mail. This self-monitoring tool could dispense counseling 24 hours a day. The computer system provided individualized counseling based on participants' answers in combination with general diabetes information. Each participant had a personal computerized file containing data entered in by his/her provider. Participants could update and modify data whenever needed. Each patient used the system six times per month for an average of 15 minutes per session.

Theory: Not mentioned

Resources Required

- Staff/Volunteers: Dietitian, physician
- Training: Videotex system use
- Technology: Videotex terminals, computerized system
- Space: Computer stations
- Budget: Not mentioned
- Intervention: Training book
- Evaluation: Questionnaires, materials to collect blood samples

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
 - Questionnaires assessed knowledge and dietary behaviors.
 - Caloric intake and body weight were measured by dietitians.
 - Blood samples were collected to measure glycemic control.

Outcomes:

- Short Term Impact: Those who participated in the intervention had significantly increased knowledge scores.
- Long Term Impact: There was no apparent improvement in overall caloric intake, but there were significant improvements regarding carbohydrate, fat and protein balance. There was no significant change in body weight but there was a slight improvement in glycemic control.

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Turnin, M. C., R. H. Beddok, et al. (1992). "Telematic expert system Diabeto. New tool for diet self-monitoring for diabetic patients." *Diabetes Care* 15(2): 204-12.