


Volume 11, 27 June 2011

Publisher: Igitur publishing

URL: <http://www.ijic.org>

URN:NBN:NL:UI:10-1-101480 / ijic2011-43

Copyright: 

Conference abstract

Telemonitoring patients with chronic diseases in primary care. Three and six-month follow-up results of a randomized controlled trial (TELBIL study)

Iñaki Martín Lesende, Comarca Bilbao Primary Healthcare District, Osakidetza – Basque Health Service, Spain

Estibalitz Orruño Aguado, Basque Office for Health Technology Assessment (OSTEBA), Department of Health and Consumer Affairs, Basque Government, Spain

M^o Carmen Cairo Rojas, Comarca Bilbao Primary Healthcare District, Osakidetza – Basque Health Service, Spain

Eva Reviriego Rodrigo, Basque Office for Health Technology Assessment (OSTEBA), Department of Health and Consumer Affairs, Basque Government, Spain

Juan Carlos Bayón Yusta, Basque Office for Health Technology Assessment (OSTEBA), Department of Health and Consumer Affairs, Basque Government, Spain

Amaia Bilbao González, Basque Foundation for Health Innovation and Research (BIOEF), Spain

María Isabel Romo Soler, Comarca Bilbao Primary Healthcare District, Osakidetza – Basque Health Service, Spain

Itziar Vergara Micheltorena, Basque Foundation for Health Innovation and Research (BIOEF), Spain

Roberto Abad García, Comarca Bilbao Primary Healthcare District, Osakidetza – Basque Health Service, Spain

José Asua Batarrita, Director of Knowledge Management and Evaluation, Department of Health and Consumer Affairs, Basque Government, Spain

Jesús Larrañaga Garitano, Comarca Bilbao Primary Healthcare District, Osakidetza – Basque Health Service, Spain

Correspondence to: Iñaki Martín Lesende, E-mail: INAKI.MARTINLESENDE@osakidetza.net

Abstract

Introduction: To address the increasing prevalence of chronic diseases, in an environment with limited healthcare resources, we propose a new realistic approach to provide healthcare services at the patient's home.

Objective: To describe the effect of a telemonitoring program for patients with heart failure (HF) and or chronic lung disease (CLD) regarding clinical efficacy, medical services use and quality of life (QoL), at 3–6 months of inclusion.

Methods: We are conducting a RCT, telemonitoring in-home patients with HF and/or CLD from primary care. For the intervention group, (IG, n=28), telemonitoring consisted of daily transmission of self-measurements respiratory/heart-rate, blood-pressure, oxygen-saturation, weight, temperature, and a brief clinical questionnaire. The control group, (CG, n=30), received standard clinical care. Outcomes on hospitalizations, mortality, QoL, functionality, caregiver burden, resource usage and cost-effectiveness at 3–6 months follow-up will be presented.

Results: Mean age 81.0 ± 7.5 years, 46.6% with both clinical conditions; 86.2% had important comorbidity, and 87.9% moderate/severe dependency (Barthel index). The two study groups were homogeneous at baseline but patients in the IG higher deficient social support (28.6% GI vs. 6.7% CG, $p=0.038$). Results at three months. Eight hospital admissions in CG and seven in IG due to diseases considered ($p=0.885$). No differences in stay of hospitalizations ($p=0.747$). Better visual analog scale (VAS) of EuroQoL-5D in IG ($p=0.001$). Result at six months follow-up. Mortality (5.4%) is much lower than expected. Only two persons decided to leave the study because they did not feel comfortable with the technique. No significant differences in hospitalization were found, although there is a trend towards a lower number of specific ones and hospital stay in the IG. Significant differences in HRQL (better in IG) and in telephone calls with professionals (higher rate in IG, although with a lower number of visits at home).

Conclusions: We propose a new telemonitoring approach controlled by primary-care professionals, in a target population with significant clinical instability (aged, comorbidity/polimedication, poor functionality and increased usage of health resources) who could benefit from it. Although there are no clinical differences in short time, except in QoL, we have to wait for longer time results.

Keywords

telemetry, chronic disease, primary health care, effectiveness, clinical trial
