
POSTER ABSTRACT

Effectiveness of self-care program for hospital readmissions prevention in patients with potentially avoidable hospitalizations: (AUTOCLUID) randomized clinical trial

19th International Conference on Integrated Care, San Sebastian, 01-03 April 2019

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Introduction: the readmissions rate for chronic obstructive pulmonary disease (COPD) is 66% a year and 25% for congestive heart failure (CHF). Strategies based on the treatment of these patients focused on prevention and health promotion of active patient through health education, have achieved a decrease of 51% in ICC readmission the following 6 months.

Objectives: Determine the effectiveness of a multidisciplinary community intervention in patients with a history of potentially avoidable hospitalizations of COPD and CHF.

Methods: Clinical randomized study in 32 patients admitted to hospital because of CHF or COPD and with one or more previous hospital admissions. After hospital discharge 14 subjects were attended by a multidisciplinary team (a nurse, a nutritionist, a psychologist and a social worker - AUTOCLUID program -) that provide individual health advice for good management and control of their illness. The 18 remaining subjects received routine clinical practice according to the disease that originates the hospital admission. Following evaluations were performed 1, 3, 6 and 12 months later: blood pressure, glycosylated hemoglobin, BNP, quality of life (SF-36, CAT and MLHFQ) questionnaires, self-management questionnaires for CHF and COPD, IPAQ physical activity questionnaire, functional dependence of Barthel and depression (PHQ9) questionnaires. Along the following year, admissions and visits to emergency and primary care physician were collected. A logistic regression model was constructed to quantify AUTOCLUID Group patients hospital readmission probability regarding the control group. Covariance Analysis was used for comparing quality of life, functional dependency, depression, physical activity and self-care questionnaires

Results: the proportion of subjects who return to the hospital, visit the emergency service or primary care physician was similar in both treatment groups (25% group AUTOCLUID versus 75% - $p = 0.412$; 46% versus 54% - $p = 1.000$ and 44% versus 56% - $p = 1.000$ - respectively). The likelihood of hospital readmission in AUTOCLUID group was 0.33 compared to the control group (95% 0.056-1.995) in the unadjusted model, and 0.58 (IC95%0.067-5.097) after adjusting by age and

BMI. There are no statistically significant differences in evaluated clinical characteristics (quality of life, functional dependence, depression, self-care and activity).

Conclusions: the attention of patients with COPD and CHF by a multidisciplinary and multilevel team have a number of admissions a year similar to that obtained with the usual clinical practice. Their quality of life, self care and functional dependence do not differ.

Limitations and future research: it was necessary to study 144 subjects but only 32 out of 217 agreed to participate in the study. New studies are necessary to achieve a sufficient evidence level. The incorporation of new technologies, such as the Tele-assistance, could facilitate patients the accessibility to follow-up visits - the main cause of non-participation detected in this study.

Keywords: congestive heart failure; chronic obstructive pulmonary disease; health education; hospital readmission; quality of life
