Title: Six minute step test reproducibility in COPD patients: Cross-sectional study

Body: Introduction: Functional tests, like six minute walk test (6MWT) are very useful in determining exercise capacity in COPD patients. However, to perform 6MWT, it is necessary a 30m corridor that could be difficult in small facilities. Six minute step test (6MST) could be an alternative, but its reproducibility hasn’t been tested in those patients. Aims: The aim of this study is to analyze 6MST reproducibility in COPD patients. Methods: In this study, 31 patients with clinical and spirometrical diagnosis of COPD were enrolled to participate. They performed three 6MST (Dal Corso, S. et al, Europ Respir J 2007; 29: 330–6), the first and second were executed by the same evaluator with a 30min interval, and the last by a different evaluator a week later. Exercise capacity was determinated by the number of steps. Intraclass correlation coefficient (ICC) and Bland-Altman plots were used. Results: Intra and inter-rater relative reproducibility was excellent (ICC>0.8). Bland-Altman plots (Figure 1) revealed acceptable error in the intra-rater analysis and higher errors in the inter-rater analysis.

Conclusion: 6MST could be used as an alternative test to verify exercise capacity in COPD patients, especially in large samples and in small facilities, since it doesn’t require a learning test like 6MWT and can be done in a room.