Background

- Chronic obstructive pulmonary disease (COPD) is a multidimensional disease known to affect not only patients but also family functioning1
- Family functioning affects several dimensions of patients’ psychological and social performance2 however its association with patient’s physical outcomes remains unknown.

Aim

- This study explored associations between family function and exercise capacity and inspiratory muscle strength in COPD.

Methods

- Patients with COPD were recruited via clinicians from hospitals and primary care centres of the centre region of Portugal.
- Data collection included (Fig. 1):
  - Exercise capacity (6min-walk test - 6MWT)3
  - Respiratory muscle strength (maximal inspiratory pressure - MIP)4
  - Family function (family adaptability and cohesion evaluation scale - FACES-IV)5
- Correlations were explored with the Spearman’s correlation coefficient.

Results

- 20 patients with COPD (85% male; 67.5±10 years; 54.3±29.4 FEV, %predicted) were included.
- Moderate and positive correlations were found between family satisfaction and 6MWT (r=0.55; p=0.02) and between family cohesion and MIP values (r=0.59; p=0.01). Strong and positive correlations (r=0.61; p=0.01) were found between family satisfaction and MIP values. No further significant correlations were found

Conclusions

- Family function correlated significantly with patients’ exercise capacity and inspiratory muscle strength.
- Further research on family functioning is needed to enhance knowledge on COPD management.

Fig. 1 - Performance of: a) maximal inspiratory pressure assessment; b) 6-min walk test; c) family adaptability and cohesion evaluation scale.

Fig. 2 – Correlations between: a) 6-min walk test and family satisfaction; b) 6-min walk test and family cohesion; c) maximal inspiratory pressure and family satisfaction; d) maximal inspiratory pressure and family cohesion.

References