AIM OF THE STUDY

To compare the physical activities in daily life between patients with COPD either living alone or with their families.

METHODS

DESIGN

Cross-sectional study

SAMPLE

10 patients with COPD living alone (LA patients)

10 patients with COPD living with their families (LF patients)

Inclusion criteria:

- COPD diagnosis (GOLD criteria)
- Stable condition
- Non-participation in rehabilitation programs in the last year
- Absence of osteo-neurological comorbidities which may limit physical activities in daily life (PADL)

LUNG FUNCTION

Spirometry

- According to European Respiratory Society (1993)
- Reference values from Pereira et al. (2008)

RESPIRATORY MUSCLE FORCE

Maximal Inspiratory Pressure (MIP)

- According to Black and Hyatt (1969)
- Reference values from Neder et al. (1999)

RESULTS

Physical Activity in Daily Life

MiniMod® (McRoberts, the Netherlands)

- 12 hours/day, 2 consecutive weekdays
- Studied variables:
  - Time spent:
    - Walking
    - Standing
    - Sitting
    - Lying

Quadriceps Muscle Force

One-Repetition Maximum test (1 RM)

- Multigym device (Riguetto®, Brazil)

Functional Exercise Capacity

Six minute walking test (6MWT)

- According to American Thoracic Society (ATS, 2002)
- Reference values from Troosters et al. (1999)

Statistical Analysis

- Graph Pad Prism 5 (GraphPad Software Inc., USA)
- Median [IQR 25% - 75%]
- Mann Whitney test
- Statistical significance: p < 0.05

Conclusion

These preliminary results suggest that patients with COPD living alone are more active in daily life than patients living with their families, despite presenting similar functional exercise capacity and muscle force. This might implicate in a different treatment approach in patients living alone or with family.