

# ESPEN 2017 Abstract Submission

**Topic:** *Nutrition and chronic diseases*

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## COEXISTENCE OF MALNUTRITION, FRAILTY, PHYSICAL FRAILTY, AND DISABILITY IN PATIENTS WITH COPD AT THE START OF A PULMONARY REHABILITATION PROGRAM

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**Presentation Method:** Oral or Poster presentation

**Please indicate your professional occupation:** Dietitian

**The presenting author fulfills the above conditions and wants to apply for a travel award:** No

**The presenting author fulfills the above conditions and wants to apply for the ESPEN Prize:** Yes

**Rationale:** Malnutrition, frailty, physical frailty, and disability seem to be ‘overlapping’ conditions, since all are to a certain extent defined by a decrease in muscle mass and/or strength, level of activity, and functional performance. However, it is unclear to what extent these conditions coexist in patients with chronic disease. We therefore aimed to determine the coexistence of malnutrition, frailty, physical frailty and disability in patients with chronic obstructive pulmonary disease (COPD) that started a pulmonary rehabilitation program.

**Methods:** In 47 patients with COPD (47% male, mean age 60.2±9.6 years, mean BMI 24.0±4.6, median FEV<sub>1</sub>%pred 33 [IQR: 25-43]), malnutrition was assessed by the Scored Patient-Generated Subjective Global Assessment. Patients were categorized as well nourished (PG-SGA A), moderate/suspected malnutrition (PG-SGA B), or severe malnutrition (PG-SGA C). Frailty was assessed by the Evaluative Frailty Index for Physical activity, and physical frailty was assessed by Fried’s criteria. Disability was measured by the WHO Disability Assessment Schedule 2.0.

**Results:** Of all patients, 40% percent (19/47) were categorized as malnourished (B or C). Eighty-five percent (40/47) were frail, 17% (8/47) were physically frail, 75% (35/47) were physically pre-frail, and 30% (14/47) were disabled. The coexistence of malnutrition and disability is limited (15%). Of physically frail patients, 75% were malnourished and 44% of frail patients were malnourished. In three patients all four conditions coexisted. Six patients were neither malnourished, frail, physically frail or disabled.

**Conclusion:** Most COPD patients starting pulmonary rehabilitation are frail, but only a minority is physically frail. Almost all malnourished patients are frail (95%) but not all frail patients are malnourished (45%).

**Disclosure of Interest:** L. ter Beek: None Declared, H. van der Vaart Other: Personal fee from Vertex, outside the submitted work, J. Wempe: None Declared, F. Ottery Other: Developer of the PG-SGA, co-developer of the PG-SGA based Pt-Global app, J. Roodenburg: None Declared, C. van der Schans: None Declared, H. Jager-Wittenaar Other: Co-developer of the PG-SGA based Pt-Global app

**Keywords:** Frailty, Malnutrition