

## Supplementary

### Description of rehabilitation program:

The outpatient rehabilitation program included 1½ hours of physical training twice weekly over a period of 7 weeks at moderate to high exercise intensity supervised by a physiotherapist. Table S1 shows the exercise content of the program. Participants were instructed in breathing and coughing techniques and encouraged to exercise at home on a daily basis to maintain and improve the level of fitness after the rehabilitation session. The patients received educational information from relevant health professionals on the COPD disease, the importance of smoking cessation, the effects of the medication, the correct use of inhalators, and appropriate food and nutrition in order to increase their muscle mass. Table S2 shows the educational content of the program.

When a patient was referred to home rehabilitation, the physiotherapist was present at each training session. The physical training program was similar to the outpatient program but the endurance training was performed as walking, with an intensity of 85% of  $VO_{2\max}$  measured by ISWT at baseline, and resistance training was performed using the participant's body weight.

The patients did not receive rehabilitation during hospitalisation.

### Composition of the rehabilitation program:

Table S1. Exercise program. Twice weekly for 1½ hours		
	Intensity	Duration
<b>Warm-up:</b> (duration 10 min)	No specific intensity	
<b>Endurance training:</b> (duration 30 min)	Borg dyspnoea 4-7	
Walking	Tempo _____	Time _____
Exercise bike	2 sets	2 minutes
Rowing machine	2 sets	2 minutes
Step bench	2 sets	2 minutes
<b>Resistance training:</b> (duration 30 min)	40-80% of 1RM	
Behind-the-neck pulldown	2 sets                      Kg _____	8 repetitions
Knee extension	2 sets                      Kg _____	8 repetitions
Sit to stand from chair	4 sets	1 minute
<b>Cool-down:</b> (duration 10 min)	No specific intensity	

**Table S2. Educational program: Once weekly for 1 hour**

<b>Topic:</b>	<b>Health professional:</b>
Training and breathing techniques	Physiotherapist
Everyday activities with COPD	Occupational therapist
COPD – the disease	Medical doctor in pulmonology
Learn to live with COPD	Nurse
Diet and nutrition with COPD	Dietician
Medical treatment for COPD	Nurse
Learn to live a chronic disease and anxiety	Psychotherapist

In the need for individual sessions e.g. smoking cessation and dietarian support the patients were referred to the outpatient clinic