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Activities of daily living: a comparison between patients with COPD and ILD

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Due to similarities in extrapulmonary features, patients with chronic obstructive pulmonary disease (COPD) and interstitial lung diseases (ILD) are commonly treated with a one size fits all approach in pulmonary rehabilitation (PR). Though this approach is inadequate, differences between populations in meaningful outcomes, such as activities of daily living (ADL), have been scarcely explored. This study explored the functional performance of patients with COPD and ILD in upper and lower-limb ADL.

Patients with COPD and ILD entering a 12-week community-based PR programme were comprehensively assessed. Functional performance was assessed with Glittre, 1-min sit to stand (STS), grocery shelving task (GST), physical performance (PPT), Chester step and 6-minute walk tests. Data were analysed with Mann-Whitney U tests.

Patients with COPD (n=68, 72%male, 66±10y; FEV1 56±20pp), showed worse functional performance than patients with ILD (n=78; 46%male, 65±14years, FVC 77±19 DLCO 57±52%predicted) in the number of laps in Glittre (COPD 3.9±1.5; ILD 4.6±0.9; p=0.014), time of the GST (COPD 49.8±14.1; ILD 45.4±14.6; p=0.018) and score of the PPT (COPD 28.1±5.6; ILD 30.6±4.0; p=0.008). No other significant differences were found.

Significant differences exist in functional performance of ADL that involve the upper limbs between patients with COPD and ILD. Future research is needed to confirm these findings and move PR to a personalised approach.

Table 1. Data from functional performance measures in patients with COPD and ILD

Functional performance outcome measures			
	COPD (n=33)	ILD (n=36)	P-value
Glittre, laps	3.9±1.5	4.6±0.9	0.014*
Glittre, time (s)	4.7±7.9	3.2±1.3	0.520
	COPD (n=67)	ILD (n=76)	
1-min STS, repetitions	25.9±10.4	23.6±8.1	0.244
	COPD (n=67)	ILD (n=63)	
Grocery shelving task, time (s)	49.8±14.1	45.4±14.6	0.018*
	COPD (n=59)	ILD (n=63)	
Physical performance test, points	28.1±5.6	30.6±4.0	0.008*
	COPD (n=49)	ILD (n=70)	
Chester step test, steps	80.6±62.9	80.3±54.0	0.646
	COPD (n=68)	ILD (n=78)	
6MWT, m	404.4±113.0	407.9±134.9	0.900

Data is shown as mean±SD.

STS: Sit to stand; 6MWT: 6-minute walk test