



# Anxiety and depression symptoms after pulmonary rehabilitation in people with interstitial lung disease: responders and non-responders

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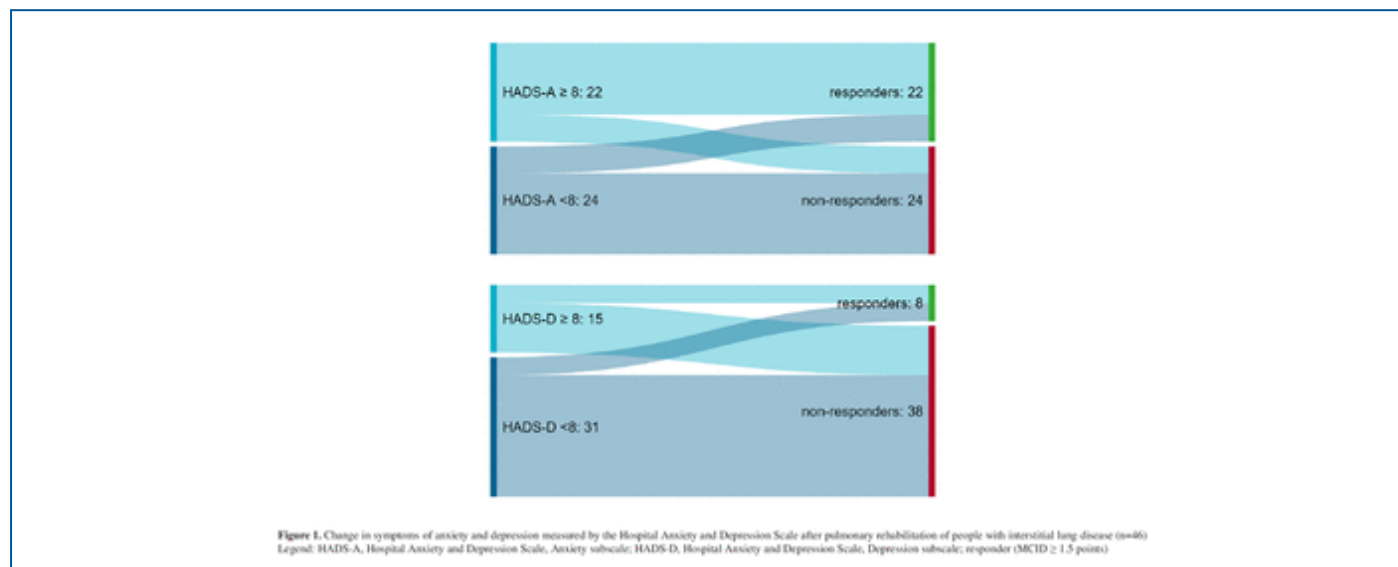
## Abstract

Pulmonary rehabilitation (PR) is an effective intervention for people with interstitial lung disease (ILD), as it improves exercise capacity, quality of life and dyspnoea. Less is, however, known about other important and frequent symptoms, such as anxiety and depression. This study explored the response of anxiety and depression symptoms to PR in people with ILD.

Participants undertook a 12-week community-based PR programme. Anxiety and depression symptoms were evaluated before and after PR with the hospital anxiety and depression scale (HADS). The sample was stratified into 2 groups according to the HADS score:  $\geq 8$  probable anxiety (PA) or depression (PD) and score  $< 8$  normal symptoms (NS). Responders were classified using the HADS minimal clinical important difference ( $\geq 1.5$  points).

46 people with ILD ( $62 \pm 13$  years; 63% ♀;  $75 \pm 20$  FVC%<sub>pp</sub>;  $56 \pm 18$  DLCO%<sub>pp</sub>) participated. Number of responders in anxiety symptoms (73% PA; HADS-A pre:  $12 \pm 3$ ; mean change:  $4 \pm 2$ ;  $p < 0.001$  vs 25% NS; HADS-A pre:  $6 \pm 2$ ; mean change:  $2 \pm 0$ ;  $p < 0.001$ ) was much higher than in depression symptoms (27% PD; HADS-D pre:  $11 \pm 3$ ; mean change:  $3 \pm 1$ ;  $p = 0.014$  vs 13% NS; HADS-D pre:  $5 \pm 2$ ; mean change:  $2 \pm 1$ ;  $p = 0.003$ ).

PR seems to improve anxiety symptoms, but it might not be as effective for depression symptoms in people with ILD. Future studies are needed to investigate the role of PR in the psychological health of people with ILD.



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