Coping styles in patients with COPD before and after pulmonary rehabilitation

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Body: Background: Pulmonary rehabilitation (PR) improves physical and psychological symptoms in COPD patients. To date, it remains unknown whether coping styles change following comprehensive PR. This study assessed retrospectively coping styles in COPD patients before and after PR programme. Methods: Coping styles were assessed in 303 COPD patients (53.1% men) before and after 36 PR sessions using the Utrecht Coping List (UCL). Additionally, lung function, St. George's Respiratory Questionnaire (SGRQ), Hospital Anxiety and Depression Scale (HADS-A and HADS-D) and six-minute walking distance (6MWD) were recorded. Results: Mean age was 62.4 ± 8.4 yrs; FEV₁ 47.9 ± 19.5% pred; SGRQ total score 56.2 ± 15.4 pts; 6MWD 441.6 ± 112.2 m; HADS-A 7.4 ± 4.2 pts and HADS-D 7.1 ± 4.1 pts. Mean change scores following PR were SGRQ total -6.3 ± 12.9 pts; HADS-A -1.7 ± 3.6 pts; HADS-D -1.6 ± 3.7 pts (all p<0.001) and 6MWD 28.9 ± 51.2 m (p<0.05). The level of active confronting coping style increased (p<0.05), while the levels of avoidance (p<0.05), passive reaction pattern and reassuring thoughts coping styles decreased following PR (both p<0.001). Palliative reaction, seeking social support and expressing emotions coping styles did not change (p>0.05).

Conclusions: Comprehensive PR results in significant change in coping styles of COPD patients. Further studies are needed to evaluate the outcome of interventions actively targeting coping style domains.