

1.10 Pulmonary rehabilitation versus usual care for adults with asthma – a Cochrane systematic review

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The aim of this Cochrane systematic review was to evaluate the effectiveness of pulmonary rehabilitation (PR) compared to usual care in adults with asthma on exercise performance, asthma control, and quality of life (QoL) as well as a number of secondary outcomes. Randomised controlled trials in which PR was compared to usual care in adults with asthma were included. PR must have included a minimum of four weeks (or eight sessions) aerobic training and education or self-management. Co-interventions were permitted; however, exercise training alone was not. The certainty of evidence was evaluated using GRADE methodology.

Ten studies were included involving 894 participants (mean age 27 to 54 years). Most programmes were outpatient based, lasting from three to four weeks (inpatient) or eight to 12 weeks (outpatient). Education or self-management components included breathing retraining and relaxation, nutritional advice and psychological counselling. Moderate certainty evidence shows that PR is probably associated with clinically meaningful improvements in functional exercise capacity and QoL upon programme completion in adults with asthma. PR appears to confer minimal effect on asthma control, although the certainty of evidence is very low to low. Unclear reporting of study methods and small sample sizes limited the certainty in the overall body of evidence. Heterogeneous study designs and interventions likely contributed to inconsistent findings across clinical outcomes and studies. There remains considerable scope for future research.

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