

Conference abstract

## Effectiveness of COPD disease management programmes: a systematic review and meta-analysis

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### Abstract

**Introduction:** Disease management programmes may enhance the quality of care provided to patients suffering chronic diseases.

**Objective:** To systematically assess the effectiveness of COPD disease management programmes.

**Methods:** Computerised search of MEDLINE, EMBASE, CINAHL, PsycINFO and the Cochrane Library (CENTRAL), for studies evaluating interventions meeting our operational definition of disease management: >2 different intervention components; >2 healthcare professionals actively involved in patients' care; patient education; intervention lasting >12 months. Two reviewers evaluated 12,749 titles, fully reviewed 124 articles, identified and extracted data from 13 articles selected by using inclusion and exclusion criteria. Main clinical outcomes were: all-cause mortality, lung function, exercise capacity, health-related quality-of-life, symptoms, COPD exacerbations and healthcare utilisation. Meta-analysis of all-cause mortality could appropriately be performed (random effects model).

**Results:** Studies included consisted of 9 randomised controlled trials, 1 controlled trial, and 3 uncontrolled before-after trials. Results suggest that disease management programmes decrease risk of hospitalisation and modestly improve health-related quality-of-life and exercise capacity outcomes. All-cause mortality did not differ between groups (OR 0.84, 95%CI 0.54–1.40).

**Conclusion:** COPD disease management programmes seem to improve patient outcomes and health system utilisation outcomes. Future studies should explore the programmes' specific elements or characteristics that bring the greatest benefit.

### Keywords

**COPD, disease management programmes, Switzerland**

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