

Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) is an umbrella term for a group of lung diseases that include chronic bronchitis, emphysema and small airways disease. Lung damage over a long period of time impairs the flow of air in and out of the lungs and causes breathlessness

Pulmonary rehabilitation

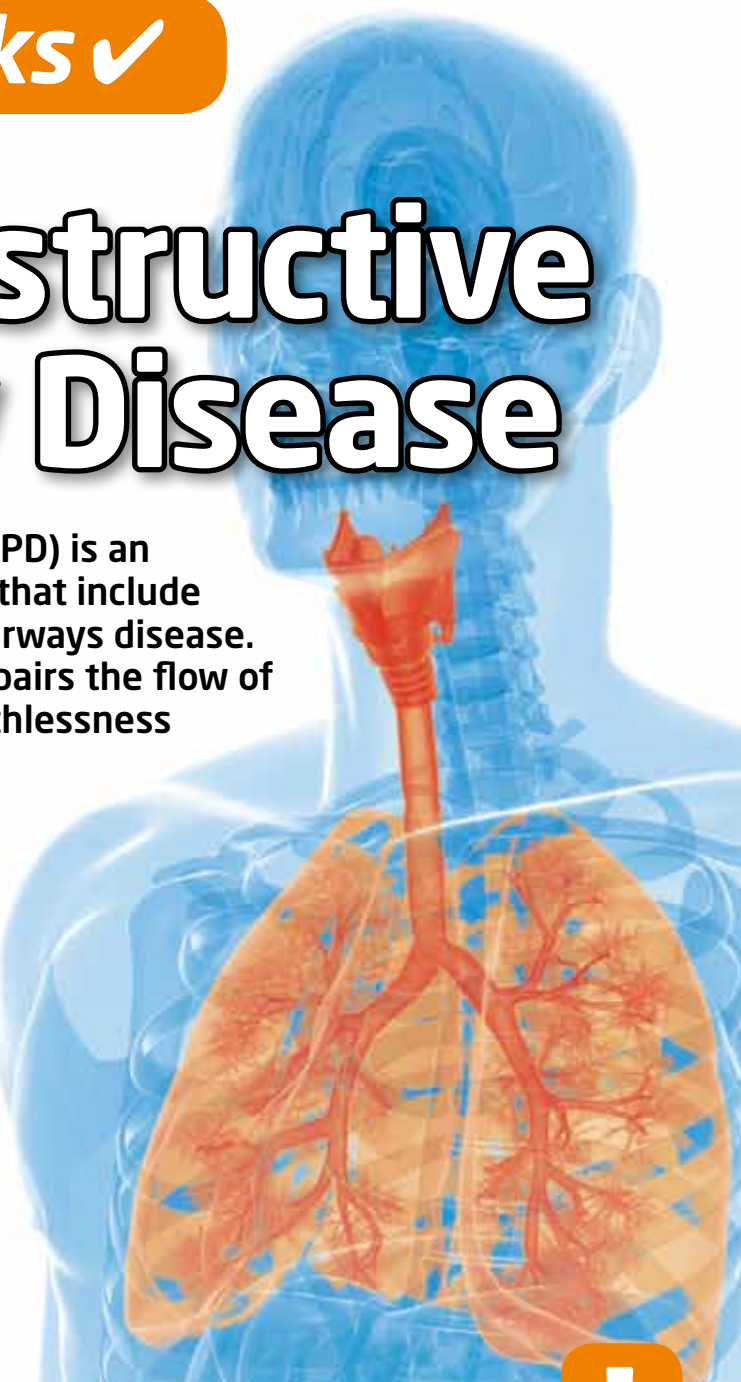
Pulmonary rehabilitation programmes are clinically effective and cost effective in improving health and quality of life, reducing length of hospital stay and reducing the number of hospital re-admissions for people with COPD. Physiotherapists are an essential part of the multi disciplinary teams that run these programmes.

The National Institute for Health and Clinical Excellence (NICE) has produced various documents supporting the use of pulmonary rehabilitation programmes in a variety of settings, including the community, as well as making the case for commissioning.^(1,2)

NICE has stated that all those with COPD suitable for pulmonary rehabilitation should receive it.⁽¹⁾

Results of a randomised controlled trial (RCT) found that for patients chronically disabled by obstructive pulmonary disease, an intensive, multidisciplinary, outpatient programme of rehabilitation including physiotherapy is an effective intervention, in the short term and the long term, that decreases hospital length of stay⁽³⁾. A study in 2010 evaluating the effect of pulmonary rehabilitation delivered post COPD exacerbation showed a reduction in re-admissions of 26 per cent with cost effectiveness demonstrated⁽⁴⁾. ▶▶

Re-admissions are reduced by 26% after pulmonary rehabilitation



Size of the problem

- COPD is the 5th biggest killer in the UK with an estimated **3.7 million** people having the disease⁽⁵⁾
- **24,816** people in England and Wales died as a result of COPD in 2008⁽⁶⁾ The disease kills more people every year in the UK than bowel cancer, breast cancer or prostate cancer⁽⁷⁾
- **COPD** is the only major cause of death whose incidence is on the increase.⁽⁷⁾ It is expected to be the third leading cause of death worldwide by 2020, exceeded only by heart disease and stroke.⁽⁸⁻¹²⁾

Conclusion

The clinical and cost effectiveness of pulmonary rehabilitation programmes for people with COPD is well documented. Awareness of COPD amongst the general public needs to be raised as many people are unaware of the condition and the link to smoking.

The possibility of combining treatment programmes for people with different diagnoses but similar symptoms is worth exploring in order to take advantage of existing expertise and to deliver cost effective services.

Case studies

A study in Canada⁽¹⁶⁾ found that over one year, pulmonary rehabilitation was associated with decreased health service utilisation, reduced direct costs and improved health status of COPD patients. The health status of patients enrolled in the programme improved significantly following pulmonary rehabilitation, irrespective of the severity of disease. The average reduction of total costs before and after the program was \$34,367 per 100 person-years or approximately \$344 per person per year.

Glenfield hospital in Leicester, UK has been offering a pulmonary rehabilitation programme to patients with chronic heart failure (CHF) as well as to those with COPD,⁽¹⁷⁾ both sets of patients showing a marked improvement.

Cost of COPD



- One in eight (**130,000**) acute medical admissions in adults is due to COPD⁽¹³⁾ making it the second largest cause of emergency admission in the UK⁽¹⁴⁾. It accounts for one million 'bed days' in hospitals in the UK each year
- **NICE** estimates that the direct cost of providing care in the NHS for people with COPD is almost **£500 million** a year. More than half this cost relates to the provision of care in hospital⁽¹⁴⁾
- It is estimated that in the UK COPD is responsible for **24 million** lost working days per annum estimated as costing **£2.7 billion**⁽¹⁵⁾
- On average, **15 per cent** of those admitted to hospital with COPD die within three months and, although estimates vary, it is thought that **25%** of patients die within a year.⁽¹⁴⁾

FURTHER INFORMATION

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