



# Differences in pulmonary and extra-pulmonary traits between women and men with COPD

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## Abstract

**Background:** Prevalence of COPD is similar for women and men. Whether sex-related differences exist in the prevalence of treatable traits is unclear.

**Aim:** To explore sex-related differences in treatable traits in COPD.

**Methods:** Two independent samples of patients with COPD referred to secondary (n=530) or tertiary care (n=2012) were analysed retrospectively. Male and female patients were matched for age, FEV1 and body mass index. Internationally accepted cut-offs were applied to identify the presence of traits. Sex-related differences were tested using independent samples t-tests, Mann-Whitney U or chi-square tests.

**Results:** Frequent exacerbations, high cardiovascular risk and activity-related severe dyspnoea were more prevalent in women than men referred to secondary care ( $p<0.05$ ). In tertiary care, severe hyperinflation, limited diffusing capacity, impaired mobility, frequent exacerbations, frequent hospitalisations, activity-related severe dyspnoea, symptoms of anxiety and depression, and poor health status were more prevalent in women ( $p<0.05$ ) and severe inspiratory muscle weakness and impaired exercise capacity were more prevalent among men ( $p<0.05$ ) (**Fig. 1**). No other significant differences in traits were found.

**Conclusions:** Sex-related differences were found in pulmonary and extra-pulmonary traits in COPD, with most traits being more prevalent among women. Clinicians should be aware of these differences to adjust treatment.



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COPD    Extrapulmonary impact    Personalised medicine

## Footnotes

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