

# Sex-related Differences of Chronic Obstructive Pulmonary Disease Impact on Life Quality: the Platino Study

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Chronic obstructive pulmonary disease (COPD) is a highly prevalent condition worldwide, with a significant impact on general morbidity and mortality and, also, on health care costs. The PLATINO study group of authors investigated recently if the clinical evolution of COPD may be different on a sex-related basis. An epidemiological sample of unselected population (5314 subjects from five Latin American cities, with or without COPD, males and females) was used. They investigated sex differences in health status perception, dyspnoea and physical activity and factors that explain these differences.

Females seem to be at increased risk for developing COPD, since they are more susceptible to the toxic effects of smoking than males. The working hypothesis was that sex differences in smoking effects could be the result of factors such as sex-related differences in airway geometry, smoking behaviour, respiratory symptoms and environmental or occupational exposures.

The study results showed, indeed, that, independent of COPD status, females reported

more dyspnoea and physical limitation than males, and that actively smoking females with COPD had more severe obstruction (assessed by spirometry) than males, despite similar cigarette exposure. Females with COPD reported worse health status perception, more anxiety and depression but these findings were present also in the general population. Although the overall distribution of COPD severity was similar between sexes, females with COPD who were current smokers had more severe COPD (and obstruction), despite similar cigarette exposure.

The conclusions of the study were that there are important sex differences in the impact that COPD has on the perception of dyspnoea, health status and physical activity limitation. Smoker females are not only more susceptible for developing COPD but, also, to have a worse clinical evolution and quality of life. If we take into account the fact that smoking habit is more and more frequent among female population, these data could have a particular value for anti-smoking preventive and therapeutical strategies.

*Comment on a paper:*

Lopez Varela M.V., Montes de Oca M., Halbert R.J., et al (for the PLATINO Team) – Sex-related differences in COPD in five Latin American cities: the PLATINO study. *Eur Respir J* 2010; 36: 1034-41