Passive smoking exposure is associated with an increased risk of COPD

More than 15% of patients with chronic obstructive pulmonary disease (COPD) are never smokers. This study attempted to correlate passive smoking exposure with the risk of developing COPD in a South Chinese population.

Participants were drawn from the Biobank cohort of over 100,000 Guangzhou residents. The study group comprised 6497 never smokers aged over 50 with valid recently recorded spirometric parameters; those with chronic diseases were excluded. Passive smoking was self-reported as exposure during childhood, in the home and in the workplace. Further categorisation included density (eg, number of smokers in a household) and duration of exposure.

More than half of the never smokers reported exposure to passive smoking; 28% reported exposure of >5 years either at home or at work. COPD (defined according to GOLD guidelines) was associated with duration (but not density) of exposure. It was more common among those with >5 years’ exposure at home and at work than those who had <2 years’ exposure. COPD was more common among men, who formed only 10.4% of the study group (men are under-represented in the Biobank cohort for cultural reasons).

The study concludes that there is a significant but small association between passive smoking exposure and the risk of developing COPD, with approximately 11.6% of all deaths in China among never smokers attributable to COPD. It has been estimated that only one-third of people in China believe that passive smoking is harmful to health.