Indoor air quality (PM2.5 and PM10) at each home visit, the patients were asked to complete spirometry and self-report respiratory symptoms. Table 1. Demographic and clinical characteristics of the study participants (N = 19)

Table 2. Association between PM_{1.0} level and the symptoms and activity of daily living of COPD patients

Table 3. Association between PM_{10} and the symptoms and activity of daily

**BACKGROUND**

Ambient particulate matter (PM) can trigger adverse reactions in the respiratory system, but less is known about the effect of indoor PM.

**PURPOSE**

In this longitudinal study, we investigated the relationships between indoor PM and clinical parameters in patients with moderate to very severe chronic obstructive pulmonary disease (COPD).

**METHODS**

- Indoor air quality (PM2.5 and PM10 levels) was monitored in the patients’ bedroom, kitchen, living room, and front door at baseline and every two months until one year.
- At each home visit, the patients were asked to complete spirometry and self-report respiratory symptoms.

**RESULTS**

Generalized estimating equation (GEE) analysis (n = 83) showed that the level of wheezing was significantly higher in patients whose living room and kitchen had abnormal (higher than the maximum accepted) PM2.5 and PM10 levels.

**CONCLUSION**

Increased PM levels were associated with worse respiratory symptoms in patients with moderate to severe COPD.

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