Author’s Reply

Sir,

We thank the reader for interest in the article and observations. In the era of evidence-based medicine changing concepts require backing of well-structured studies and chronic obstructive pulmonary disease (COPD) is no different. As you rightly pointed out that older concepts in COPD have described the disease well, but emerging data suggests that there are various clinical phenotypes of COPD throwing light on the heterogeneity of the disease. As with other diseases, gender adds to the heterogeneity of the disease. Structural organization, hormonal influences, and inflammatory responses do vary with gender. Also, the current COPD management focuses on symptom control and trying to halt the downhill course of the disease. Trying to understand the gender characteristics, treatment can be tailored-made to achieve these goals.

As regards to your observations, females in our study had more chronic bronchitis feature on chest radiograph but had more incidence of dry cough, which was similar to the observation made by Cydulka and colleagues. This may reflect differences in mucus hypersecretion, the sociological aspect of females not liking to admit to having sputum or swallowing of the sputum by them while working in kitchen/home. According to the National Family Health Survey-III (NFHS-3) more than one-third of Indian females have a body mass index (BMI) below normal COPD induces a catabolic state and exaggerates this malnourishment. Also more than half of the Indian females have reported to be anemic. Possible explanations being, low dietary intake, poor availability of iron and chronic blood loss due to hook worm infestation and malaria. The anemia found in female COPD patients is the result of the underlying malnourishment. Other causes could be increased blood loss during menstruation/child birth or due use of oral steroids (due to misdiagnosis as asthma). Among the patients with lung cancers, squamous cell histology was found in 57.6% males and 44.4% females, whereas adenocarcinoma was found in 35.6% males and 33.3% females. Similar to our study, a recent review article also highlights concerns about the gender differences in COPD and the need for further research into it. COPD in
females may represent a separate phenotype and urges us to think beyond the classical division of the disease into emphysema and chronic bronchitis. Future may hold specific phenotype-based therapy for COPD and clear knowledge will help deliver better quality of life to the patients and reduce COPD-related mortality.

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