Reviewer's report

Title: Correlation of respiratory symptoms and spirometric lung patterns in a rural community setting, Sindh, Pakistan: a cross sectional survey

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Reviewer: Mark Weatherall

Reviewer's report:

The manuscript presents a cross-sectional study that relates responses to an adapted international questionnaire for respiratory symptoms to simple spirometry, and in particular whether the strength of association may be sufficient to indicate that the questionnaire may be used as surrogate markers of air-flow obstruction or restrictive pattern spirometry in a poor rural community.

The authors found that there is an association between symptoms and spirometric abnormalities.

I think the manuscript would be improved by, in table 3, listing the actual N/N for the numbers of participants with or without the symptoms in relation to the cut-offs for abnormal spirometry and the study definitions of obstructive lung disease and restrictive lung disease. This would enable readers to directly calculate more useful indicators of whether the questionnaire may be a useful surrogate for spirometry such as sensitivity, specificity, and likelihood ratios. I wondered if this an approach the authors might consider as they are interested perhaps more in the ability of the questionnaire to identify participants with abnormal spirometry in particular patterns. It is not particularly surprising that a respiratory questionnaire is associated with abnormal spirometry.

Other issues the authors might like to consider:

Page 4: The definition of COPD proposed by the authors does not correspond to the GOLD definition and the references are to questionnaires rather than definition papers.

Page 7: It looks like the summary figures quoted for FVC and FEV1 are percent predicted rather than ml (similar comment for Table 1, looks like percent predicted); I guess the FEV1/FVC ratio is just the actual percentage and not percent predicted?

Table 2: Suggest putting the denominator for each numerator as well particularly as it looks like there are missing data involved.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

None