Research Ideas on Respiratory Conditions and Tobacco Dependency Abstract

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Assessing feasibility of methods to estimate cost of illness of COPD in western rural India

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Research question: To assess feasibility of methods to estimate the costs of care, quality of life and wider societal burden (mortality, morbidity, lost productivity, economic impact on family) due to COPD

Background: Chronic respiratory diseases account for 4.7% of global disability-adjusted life years (DALYs), with COPD making up two thirds of the total and asthma nearly a fifth. The three most important factors in individual patients that determine the high economic and societal costs of COPD are disease severity, presence of frequent exacerbations of disease and presence of comorbidities.

The major drivers of the direct costs of COPD (i.e., the cost associated with health care provision and drug costs) are hospital care, medication and oxygen therapy, with the magnitude of these costs correlated with disease severity, health status, age, and the specialty of the treating physician.

Methodology: We will collect comprehensive data to design a strategy for estimating cost of illness (COI) for COPD to inform future health-economic studies.

COI data will be collected from 60 known cases of COPD from western rural India with recall period of 12 months. Equal numbers of an age-sex matched healthy comparison group will be recruited to compare with COPD cases.

Family, health system and societal perspective will be adopted which will be useful for informing policy decisions to local stakeholders and to generate evidence to design the health economic components of further fully-powered studies. Interviews will be conducted with key stakeholders in the community to explore the burden of COPD to the society.

Questions to discuss

- 1. Which existing tools should we consider while designing a robust method for this study?
- 2. What other factors should we include, and to generate cost of illness data?
- 3. How can we ensure scalability for large health economics studies around COPD in LMICs?

Declaration of Interest: The Authors declares there is no conflict of interest.

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References and Clinical Trial Registry Information

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