

Prevalence and Predictors of COPD in Adult Population of Karachi, Pakistan – the BOLD Pakistan Component

Department: Community Health Sciences

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Background:

COPD is the fourth leading cause of morbidity and mortality worldwide and is projected to rank fifth in burden of disease in 2020. A major problem is the incomplete information about the causes, prevalence, and burden of COPD, especially in developing countries. The BOLD (Burden of Lung Disease) initiative is collecting country-specific data on the prevalence, risk factors and social and economic burden of chronic obstructive pulmonary disease (COPD) from different countries across the globe. There is little data available from Pakistan regarding the burden of COPD therefore, the project will add significantly to the data on this important public health problem in Pakistan.

Primary Objectives:

1. Measure the prevalence of COPD and its risk factors in adult population of Karachi, Pakistan and compare with other developing countries.
2. Estimate the burden of COPD in terms of its impact on quality of life, activity limitation, respiratory symptoms, and use of health care services.
3. Develop a validated model to project future burden of disease for COPD.

Methods:

This study will be conducted in Karachi and male and female participants aged 40 years or above will be included. Multistage cluster sampling will be done where 75 clusters out of 7500 clusters of Federal Bureau of Statics will be selected randomly. From each cluster 24 households will be selected using simple random sampling. All eligible individuals in the selected households will be recruited. Data will be collected through questionnaire and spirometry will also be done using NDD spirometer. Field work is expected to start from April 2014.

Research Impact:

In context of Pakistan, no such study has been conducted. BOLD is an international initiative which has recently completed surveys in India, Bangladesh and Sri Lanka and adding Pakistan to the list would be really helpful for establishing data base regarding this important public health problem and associated risk factors in the country. Data obtained from population-based study on COPD prevalence and its economic burden could also be used to estimate health care needs and costs.