

Prevalence and Predictors of Asthma in Adult Population of Karachi, Pakistan

Department: Community Health Sciences

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Principal Investigator: Dr Asaad Nafees

Co-investigators: Dr Zafar Fatmi, Dr Muhammad Irfan, Dr Romaina Iqbal, Mr Ashar Malik and Mr Iqbal Azam

Background:

An estimated 300 million people currently suffer from asthma and the incidence and prevalence of asthma is increasing globally, with high mortality rates in developing countries. There is scarce data regarding this important Public Health problem from Pakistan.

Primary Objectives:

- To determine prevalence of asthma in adult population of Karachi
- To determine association of asthma with volatile organic compounds (VOCs) in indoor environment

Methods:

This would be a community based cross-sectional survey involving 2000 adult men and women, aged ≥ 18 years, selected through multi-stage cluster sampling from the 18 towns within Karachi city. Data would be collected through structured questionnaire and spirometry. Indoor air pollution levels will be assessed through indoor air sampler (Yes Plus).

Research Outcome:

Prevalence of asthma and respiratory symptoms will be reported. Adjusted odds ratios will be determined for the association of various factors with asthma through multivariate logistic regression analysis. This study will help to fill the gap in knowledge regarding burden of asthma and associated risk factors in Pakistan. Information regarding associated factors such as air pollutants including Formaldehyde, NO₂, benzene and toluene will be extremely important for the policy makers in order to develop preventive strategies in Pakistan as well as in other developing countries.