

Project Title: Multifaceted intervention package for protection against cotton dust exposure among textile workers - 'MultiTex' study

Department: Community Health Sciences

Project Sponsors: Higher Education Commission, Pakistan

Duration: March 2015 – March 2017

Principal Investigator: Dr Asaad Nafees

Background:

Cotton dust exposure at textile industries leads to an increased risk of various respiratory illnesses and symptoms. Occupational safety and health training of workers has been identified as an important factor for promotion of appropriate behavior in an organization. However, there is scarcity of data regarding various training methodologies and their relation with occupational morbidity and mortality. Multi-faceted intervention strategies are required to bring about significant changes in the occupational setting of textile mills in order to reduce the associated risks and hazards.

Aims of the project:

This study is planned to evaluate the effectiveness of a multifaceted intervention package for improvement in knowledge, attitude and practices relating to cotton dust exposure in textile industries of Karachi. In addition, we will also evaluate the effectiveness of this intervention for control of pollution sources, such as decreasing cotton dust levels and improvement of occupational health.

Methods:

This would be a pre-post intervention study where we will assess the effectiveness of multifaceted intervention package over a period of one year. The intervention will comprise of administration and workers' training regarding preventive measures. Workers will be provided Personal Protective Equipment (PPEs) to wear during duty hours. Cotton dust levels at the textile mill will be measured to assess trends in dust levels. The study would then evaluate the effect of this intervention package by assessing change in knowledge level and practices after the intervention, and also any change in occupational health. Four to five large textile mills in Karachi will be selected for intervention and approximately 150-200 workers from each of the selected mills will be enrolled in the study.

Research Impact:

This project is in line with the global and local occupational health research priorities and will help provide the much needed information regarding context specific interventions for a major industrial sector not only in Pakistan but also in other developing countries. Research impact could be assessed in terms of capacity building and trainings provided through the project, as well as policy implications related to occupational health and safety in Pakistan.

Data collection is currently underway and results will be available once the end line survey is concluded.