# Economic burden of occupational illness on women workers in textile industry, Pakistan

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## **Key Words**

Textile mills, women worker, occupational health, sickness absence, cost of illness

## Abstract

The relationship between respiratory diseases and work in textile factories has long been identified in the literature, but the economic burden of illness has not been described. This study provides estimates of occupational illness among women textile workers and associated health cost. The analysis determines that women workers bear a significantly higher disease burden than the control group. Within worker, the risk of respiratory diseases is significantly higher for those who work overtime and longer hours per week. The estimated out of pocket health expenditures stand at Pakistan Rupees 647 in the stipulated time of 15 days. Given low wages of women workers, the out-of-pocket expenses drain a substantial proportion of monthly income of the workers. The research recommends that appropriate minimum dust standard should be set and monitored for the safety of the workers.

# Introduction

The textile is a labour intensive industrial sector in many developing countries including Pakistan. It employs approximately 60 million workers globally, majority of them are women (ILO, 2009). Apart from employing millions of workers, the industry can also be highly polluting and contributes to indoor air and water pollution (Memon et al. 2008; Khan et al. 2015). The relationship between cotton dust and respiratory diseases has repeatedly been established in the literature (Wang, et al. 2003; Aleamu et al. 2010; Bates, et al. 2010;) but little attention has been paid on illness associated health cost borne by workers. From policy perspective, these estimates are very important in order to promulgation of minimum standards for the industry and assigning public funds for "workers' welfare and social security" (Khan, 2017). Therefore, research must clarify, not only a relationships between development of respiratory diseases and level of dust in textile mills, but also economic aspect of dust pollution which is missing in the literature.

The objective of this research is to provide this needed input by examining the economic burden of pollution on women workers in the textile industry in Pakistan. Data of 541 female textile workers were collected for analysis from 18 spinning mills. Data of comparable 513 non-textile women were also collected for comparison. The analysis validates that women workers bear a significantly higher disease burden than the control group. There appears to be a general trend of increasing risk of respiratory diseases for women, working overtime and longer hours/week. In terms of health cost, the ill workers expend Pakistan Rupees 647 out of their pockets in the stipulated time frame. Given low wages of workers, the out-of-pocket expenses put a significant financial burden on the workers. Hence, incidence of occupational illness and associated absence from work, also strain productivity and profitability of firms. It certainly makes an economic case for promulgation of minimum cotton dust standards in textile mills.

#### **Research Methods**