

عنوان مقاله:

Clinical Respiratory Symptoms and Spirometric Parameters among Tile Manufacturing Factory Workers, Yazd, Iran

محل انتشار:

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خلاصه مقاله:

Background & Aims of the Study: Respiratory diseases are considered as the most important occupational diseases and the absence in the workplaces. Workers in the tile and ceramic industries are exposed to high concentrations of dusts. The main aim of the present study was to evaluate the pulmonary reactions and pulmonary function tests associated with exposure to dust among workers of a tile industry, Yazd, Iran. **Materials & Methods:** This research was designed as a cross-sectional research. All workers (n=26) working in the press and spray halls were considered as exposed (case) group. Also 17 unexposed workers (control group) were selected for interview as well as respiratory symptom questionnaires were administered to them. Demographic data and lung function tests of participants were gathered and analyzed. **Results:** Demographic and socioeconomic variables of both groups were similar ($p > 0.05$). Total dust and respirable dust were measured in the exposed group equals to 29.94 ± 10.24 and 17.69 ± 7.57 . Total dust and respirable dust in the control group were measured equals to 3.94 ± 2.62 and 1.73 ± 4.7 respectively. The results were different significantly ($p < 0.05$). The prevalence of respiratory symptoms was 11.5-38.5%. These symptoms in case group compared to control group, had higher prevalence of cough, phlegm. The results were significantly increased in exposed workers than unexposed workers ($p < 0.05$). Decrease in pulmonary function test was significantly higher in exposed workers than unexposed workers ($p < 0.05$). **Conclusion:** Our finding revealed that a clear link exists between high levels of airborne dust and the prevalence of respiratory symptoms among workers. Based on this fact and in order to reduce pulmonary complications, preventive measures plan in the factory, such as technical measures (suitable ventilation system) and training programs about the proper using of personal protective equipment should be considered.

کلمات کلیدی:

Pulmonary function test, Respiratory symptoms, Total dust, Tile industry, Air pollution, Iran

