

A Cross-Sectional Study of Effect of Smoking on Lung Functions of Spinning Mill Workers

Saoji Ajeet, Choudhury Kantibhushan, , Deoke Aniruddha and Mudey Abhay*

Department of Community Medicine, NKP Salve Institute of Medical Sciences and Research Center, Nagpur, Maharashtra, India

**Department of Community Medicine, Jawaharlal Nehru Medical College, Sawangi (M), Wardha, Maharashtra, India*

Telephone: 91-9373187088, E-mail: abhaymudey@hotmail.com

KEYWORDS Spinning Mill Workers. Restrictive Impairment. Obstructive Impairment. Cotton Dust. Exposure

ABSTRACT The present study was undertaken among 465 spinning mill workers during November 2008 to October 2009 with two- fold objectives to estimate the prevalence of lung function impairment and smoking among spinning mill workers and to study the effect on lung functions of these workers in relation to their smoking behavior. Forced vital capacity (FVC), forced expiratory volume in one second (FEV1) and ratio of FEV1/FVC were taken into consideration and results of lung functions testing were correlated with smoking behavior. The result revealed prevalence of smoking was (34.6%) among workers. 266 (57.6%) had normal lung function whereas 196 (42.4) had impaired lung functions. This study showed that the prevalence of impaired lung functions in smoker was significantly higher than in non- smokers. Also, the lung function impairment were significantly more in relation to duration of smoking and duration of exposure to cotton dust. The findings of the present study indicate smoking acts as a significant risk factor.