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**Original article**

**Physiological effect of substance abuse on the Pulmonary Functions in rural Uttar Pradesh**

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**Abstract:**

**Background:** In India substance abuse is a common habit prevalent in both urban and rural areas. Cigarette and bidi smoking, tobacco chewing, has extensive effects on respiratory function and is clearly implicated in the etiology of a number of respiratory diseases.

**Objectives:** 1. To study and compare the pulmonary function tests among smokers and non-smokers in a rural area. 2. To study the role of possible associated factors and relation of type, quantity and duration of common substances abused on the pulmonary function tests.

**Methods:** A cross sectional study was carried out in Hind Hospital, Lucknow to assess the pulmonary function tests on computerized spirometer in 200 male subjects, having habit of substance abuse, in field practice area of HIMS, Lucknow. **Statistical analysis**: SPSS Statistical Software.

**Results**: Almost all the pulmonary function parameters were significantly reduced in smokers as compared to other substances of abuse liability and obstructive pulmonary impairment was commonest.

**Conclusion:** By spirometry a spectrum of pulmonary disorders may be detected at an early stage and subsequent morbidity can be minimized.

**Key words**: Substance abuse, Spirometry, Pulmonary functions, Rural area