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Risk Factors Associated with Pulmonary Tuberculosis among Health Care Workers of Mayo Hospital, Lahore, Pakistan

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Abstract:

Tuberculosis (TB) is an occupational hazard for health care workers (HCWs) who are at greater risk of developing TB than the general population. This retrospective study was conducted to investigate the risk factors for active TB and determine the co-morbid conditions related to pulmonary TB among health care workers of Mayo Hospital, Lahore, Pakistan. During the study period, a total of 26(52%) patients were found to have active pulmonary tuberculosis out of 50 cases meeting diagnostic criteria of TB. The most common risk factors for TB were smoking (64%) followed by illicit drug use (56%), use of public transport (52%), intravenous drug abuse (42%), and alcoholism (28%). All these risk factors were found to be significant in the transmission of pulmonary tuberculosis ($p < 0.05$). Cough (88%) and chest pain (68%) remained the most pre-dominant pulmonary symptoms while haemoptysis (26%) was least in patients. Tuberculosis is seen increasingly in patients with medical conditions like silicosis (72%) followed by intestinal infections (68%), diabetes mellitus (48%), immunosuppressive therapy (26%), cancer (8%), and HIV (4%) patients in co-morbid condition. There is relatively little research on the risk factors of TB in health care workers in Pakistan, despite the importance of the issue. To determine the true extent of the TB epidemic in health care workers, regular screening for TB disease should be conducted on all health care workers in all health care facilities. Medical and public health workers should strengthen health education for TB prevention and treatment and promote smoking cessation. These findings further support the need for improved infection control measures not only in TB or drug-resistant TB wards or areas perceived to be at high-risk but also throughout hospitals to protect HCWs.

Keywords: Tuberculosis, risk factors, transmission of pulmonary tuberculosis, health care facilities.