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THE USEFULNESS OF PRE EMPLOYMENT CHEST RADIOGRAPHY AS A HEALTH SCREENING METHOD PRIOR TO EMPLOYMENT

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Employers often use tests and other selection procedures to screen applicants prior to employment. The goal of the pre-employment examination is to determine whether an individual is fit to perform his or her job without risk to himself or others. For more than two decades chest radiographs have been performed as a pre employment health assessment among all the permanent staff members in University of Peradeniya. Although researchers in other countries have recently questioned the value of this long standing practice, no attempt has been made to consider this evidence in relation to Sri Lanka. The objective of this study was to determine the usefulness of pre employment chest radiography among the employees of the University of Peradeniya as a health screening method prior to employment, by detecting pulmonary tuberculosis.

This was a retrospective study on 702 records of chest radiographs, performed at the Health Centre University of Peradeniya, as a routine medical screening prior to employment, from 1st January 1991 to 31st December 2011. Of the 702 chest radiographic reports 685 (97.58%) were normal and 17 (2.42%) were considered as having abnormalities. Among those 17 chest radiography reports, there were 2 with mild cardiomegaly (0.29%), 5 hyper inflated lungs or mild basal emphysema (0.71%), one hilar enlargement (0.14%), one healed rib fracture (0.14%) and 7 thoracic scoliosis (0.10%). There were no positive results with respect to active pulmonary TB. Only one report (0.14%) revealed healed pulmonary tuberculosis.

In conclusion, the majority of the study sample had normal chest radiographs whereas only 2 % had abnormal examinations. Chest radiograph could be considered a useful screening tool to exclude chest abnormalities. However it may not be useful as a screening method to exclude pulmonary tuberculosis.