

FACILITATING OCCUPATIONAL HEALTH USING MATHEMATICAL MODELS: A STUDY ON PULMONARY FUNCTIONAL STATUS OF FEMALE HUMAN RESOURCES ENGAGED IN BIDI-MAKING

TANAYA SANTRA, NEEPA BANERJEE, SANDIPAN CHATTERJEE,
SURJANI CHATTERJEE, AYAN CHATTERJEE, SATABDI BHATTACHARJEE,
SWEETY BARDHAN AND SHANKARASHIS MUKHERJEE

Biri making, a labour intensive activity in unorganized sector in India, exposes human resources associated with it to occupational hazards especially involving the lungs as components present in tobacco leaves are harmful for human health in particular for the lung. In this regard, Peak Expiratory Flow Rate (PEFR), an indicator of lung function status has been assessed in 54 adult Bengalee females (24 - 39 years) involved in bidi making for at least 3 years. Further, the study sought to find out and/or validate the relationship, if any, existing between select anthropometric variables and the pulmonary function indicator, PEFR, as many a time it is not feasible for these individuals to go for pulmonary function tests. It has been found that select anthropometric variables were significantly ($P < 0.05$) correlated with PEFR. On obtaining significant correlation, regression models were developed and validated for usage in the particular segment of society.
