Respiratory disorders associated with dust exposure among construction workers at Bornean higher learning institution teaching hospital

ABSTRACT

Respiratory disorders can occur due to dust exposure at workplace. Dust exposure which consists of silica, asbestos and other type of mineral dust are very common. The high dust exposure can increase the workers risk of having respiratory disorders. The association between dust exposure and respiratory disorders among construction workers in Sabah are not well studied. This study aims to establish the association between respiratory disorders and dust exposure among construction workers of a Bornean higher learning institution teaching hospital. A cross-sectional study was done among the said construction workers. A standardised respiratory disorders questionnaire and spirometry machine were used. Dust exposure were measured using gravimetric method after sampled using personal air sampler. Age, smoking status, and marital status was significantly associated with respiratory symptoms. A higher prevalence of respiratory symptoms was higher among males (42.7%) compared to their female counterpart (21.4%). A higher prevalence of respiratory disorders among widow/widower/divorced workers (50.0%) compared to married (45.8%) and single workers (25.0%). A higher prevalence of respiratory symptoms among workers who smoke (51.2%) compared to workers who does not smoke (22.7%) also observed. Piping workers had the highest dust exposure and followed by the cement and plastering workers.