MORTALITY FROM CANCER AND OTHER CAUSES IN A COHORT OF WORKERS WITH ASBESTOSIS IN HONG KONG

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Objectives To investigate the mortality from cancer and other causes of a cohort of workers with asbestosis in Hong Kong. **Methods** The historical cohort comprised of 124 male workers with confirmed asbestosis during 1986–2008; it was followed up to December 31, 2008 to ascertain the vital status and causes of death. Person-year method was used to estimate the standardised mortality ratio (SMR), and indirect method proposed by Axelson was applied to adjust for the potential confounding effect of cigarette smoking.

Results 86 deaths occurred after 432.8 person-years of observations. The rate of lost-to-follow-up was low (4.8%). We observed a significantly elevated SMR for overall mortality (6.06, 95% CI: 4.90 to 7.51), all cancers (7.53, 5.38 to 10.25, 36 deaths), lung cancer (7.91, 4.32 to 13.29, 14 deaths), mesothelioma (6013.63, 3505.95 to 9621.81, 17 deaths), and most non-malignant diseases including tuberculosis, pneumonia, asbestosis, chronic obstructive pulmonary diseases, all heart disease and acute myocardial infarction. After smoking was indirectly adjusted, significantly elevated risks were retained for all deaths (4.37, 3.53 to 5.41), all cancers (5.09, 3.63 to 6.93), lung cancer (4.01, 2.19 to 6.73), and tuberculosis (12.17, 2.51 to 35.55); while it was borderline for all heart diseases (2.42, 0.97-4.98) and acute myocardial infarction (0.9-9.17). A positive gradient with net years of exposure to asbestos was observed for mesothelioma and lung cancer.

Conclusions This study reveals that asbestosis was associated with an increased risk of mortality from all causes, all cancers, and major causes of death from malignant and non-malignant diseases.