1. Abstract

Objectives: Pneumoconiosis is common industrial chronic lung disease among construction site workers in Hong Kong. The aim of this project is to examine the prevalence, performance of screening instruments, risk factors of depressive disorders and alcohol related disorders in patients with Pneumoconiosis.

Methods: Three hundred and 90 Pneumoconiosis and healthy control subjects were recruited from the case register of the Pneumoconiosis Compensation Fund Board and social centres for the elderly. Demographic and clinical data, reflecting the severity of patients' Pneumoconiosis diseases, were collected. Screening instruments for psychiatric problems will be administered. In addition, a psychiatrist will conduct a structured clinical interview (SCID-DSMIV) to diagnose psychiatric diseases, according to DSMIV criteria. Subjects' quality of life, functioning, psychosocial risk factors and severity of depression will be measured.

Results: Thirty-seven (12.3%) of the pneuomoconiosis group had a DSM-IV diagnosis of depressive disorders, their mean HDRS score was 11.0+4.2. The frequency of depressive disorders among the control group was 3.3% (n = 3). The frequency of alcohol related disorders in the pneumoconiosis and control group was 1.1% (n = 3) and 1.1 % (n = 1), respectively. The optimal cut-off point of GDS in detecting any type of depressive disorders was 9/10, with a sensitivity, specificity and area under the ROC curve of 78%, 74% and 86%, respectively. The results of univariate logistic regression using the

presence of depressive disorders as dependent variable revealed that number of concurrent medical diseases, FVC, FVC%, Lubben Social Network Scale (LSNS) and Instrumental Activities of Daily Living (IADL) score were significant predictors of depressive disorders. Multivariate logistic regression analysis found that IADL and LSNS scores were the independent predictors of depressive disorders. In comparison to the non-depressed group, depressed patients had lower activities

and summary St. George Respiratory Questionnaire (SGRQ) sub-scores as well as summary scores. The Pearson's correlation coefficients between GDS and SGRQ symptom, activities, impact and summary scores were 0.322 ($p < 0.001$), 0.312 ($p < 0.001$), 0.443 ($p < 0.001$) and 0.412 ($p < 0.001$), respectively.

Conclusion: Depressive disorders are common in patients with pneumoconiosis in Hong Kong while ARD are rare. Depressive disorders associate with poorer quality of life. GDS can be used as a screening instrument of depressive disorders. Independent predictors of depressive disorders were IADL and LSNS scores. Strategies in prevention, early detection and treatment of depressive disorders should be incorporated in the rehabilitation programs.