

## **Determinants of Willingness to Undergo Lung Cancer Screening among HighRisk Current and Ex-smokers in Sabah, Malaysia: A Cross-Sectional Pilot Study**

### **ABSTRACT**

Background: Attitudes towards smoking, lung cancer screening, and perceived risk of lung cancer have not been widely studied in Malaysia. The primary objective of this study was to describe the factors affecting the willingness of high-risk current smokers and ex-smokers to undergo low-dose computed tomography (LDCT) screening for lung cancer. Methods: A prospective, cross-sectional questionnaire study was conducted in current smokers or ex-smokers aged between 55 and 80 years at three hospitals in Kota Kinabalu, Sabah, Malaysia. The questionnaire recorded the following parameters: perceived lung cancer risk; Prostate Lung Colon Ovarian Cancer 2012 risk prediction model excluding race and ethnicity predictor (PLCOM2012norace); demographic characteristics; psychosocial characteristics; and attitudes towards lung cancer and lung cancer screening. Results: A vast majority of the 95 respondents (94.7%) indicated their willingness to undergo screening. Stigma of lung cancer, low levels of knowledge about lung cancer symptoms, concerns about financial constraints, and a preference for traditional medication were still prevalent among the respondents, and they may represent potential barriers to lung cancer screening uptake. A desire to have an early diagnosis (odds ratio [OR], 11.33; 95% confidence interval [CI], 1.53 to 84.05;  $p=0.02$ ), perceived time constraints (OR, 3.94; 95% CI, 1.32 to 11.73;  $p=0.01$ ), and proximity of LDCT screening facilities (OR, 14.33; 95% CI, 1.84 to 111.4;  $p=0.01$ ) had significantly higher odds of willingness to undergo screening. Conclusion: Although high-risk current smokers and ex-smokers are likely to undergo screening for lung cancer, several psychosocial barriers persist. The results of this study may guide the policymakers and clinicians regarding the need to improve lung cancer awareness in our population.