## Rate of smoking cessation and factors associated with successful quit smoking in Seremban District of Malaysia

## ABSTRACT

Introduction: Smoking is a major public health significant and a leading preventable cause of premature mortality. Assisting smoking cessation is important due to potential positive health impacts. The establishment of "Quit Smoking Clinics" reflect a great commitment by the health authority to reduce the national burden of smoking prevalence. Aim: The objective is to measure the prevalence of smoking cessation and factors associate with successful quit smoking in all public healthcare "Quit Smoking Clinic" in Seremban district, Malaysia. Method: This retrospective cross-sectional study uses registry data and clinical notes from public healthcare clinics in Seremban district from January 2019 to June 2019. The outcome of interest was the proportion of smokers that enrolled in "Quit Smoking Clinic" who remained abstinent at six months of follow-up. Multivariate analysis was done to determine the predictors for successful smoking cessation in the study. Result: Out of the 285 smokers included in this study, 86 smokers (30.2%) guit smoking in this programme. Significant predictors of quitting smoking were use of nicotine replacement therapy (NRT), frequency of attending the appointments, presence of diabetes comorbidity, and Malay ethnicity. The Hosmer test showed a good model fit (p-value 0.998) and area under the curve (AUC) was 0.96% (95% CI 0.94–0.98) in the receiver operating characteristic (ROC) curve. Conclusion: The "Quit Smoking Clinic" programme showed good outcome and the service should be expanded to the private sector. Predictors for smoking cessation identified can be used by policy makers to design more targeted approaches, ensuring more smokers guit smoking.