

Supplementary materials to: Fong L, Lu RS, Koh MS, et al. Factors associated with willingness to quit smoking in a hospital-based smoking cessation programme. Ann Acad Med Singap 2026;55:OnlineFirst.
DOI: <https://doi.org/10.47102/annals-acadmedsg.2026172>.

Supplementary Table S1. Additional baseline characteristics of smokers referred to an inpatient smoking cessation service stratified by willingness to quit smoking at enrolment.

Characteristic	Overall	Undecided/No	Yes	p-value¹
	N = 953	N = 489	N = 464	
#FEV ₁ % predicted, Median (Q1, Q3) (N=68)	87.00 (73.00, 97.00)	97.00 (81.00, 100.00)	85.50 (71.50, 93.50)	0.2
#FEV ₁ /FVC Ratio, Median (Q1, Q3) (N=68)	77.55 (72.25, 82.55)	73.80 (65.20, 79.50)	78.20 (72.90, 82.90)	0.055
#CAT score, Median (Q1, Q3) (N=690)	1.00 (0.00, 5.00)	0.00 (0.00, 2.00)	3.00 (1.00, 7.00)	<0.001
#mMRC Dyspnoea Scale score, Median (Q1, Q3)	0.00 (0.00, 1.00)	0.00 (0.00, 0.00)	0.00 (0.00, 1.00)	<0.001
#CDQ score, Median (Q1, Q3)	17.00 (12.00, 22.00)	17.00 (12.00, 22.00)	18.00 (12.00, 22.00)	0.4
#Hb (g/dL), Median (Q1, Q3)	14.00 (12.20, 15.20)	13.90 (12.35, 15.10)	14.00 (12.10, 15.30)	0.5
#TW (10 ⁹ /L), Median (Q1, Q3)	8.85 (7.13, 11.13)	8.84 (7.13, 11.29)	8.88 (7.12, 11.05)	0.7
#Eosinophil absolute (10 ⁹ /L), Median (Q1, Q3)	0.17 (0.09, 0.31)	0.16 (0.07, 0.29)	0.19 (0.10, 0.33)	0.018
#Urea (mmol/L), Median (Q1, Q3)	5.00 (3.90, 6.40)	4.80 (3.80, 6.40)	5.20 (4.00, 6.50)	0.033
#Creatinine (μmol/L), Median (Q1, Q3)	79.00 (69.00, 95.00)	79.00 (69.00, 93.00)	80.00 (69.00, 97.00)	0.3
*PVD, n(%)	31 (3.3%)	13 (2.7%)	18 (3.9%)	0.4
*PHT, n(%)	6 (0.6%)	2 (0.4%)	4 (0.9%)	0.6
*Previous tuberculosis, n(%)	8 (0.8%)	4 (0.8%)	4 (0.9%)	1.0
*GORD, n(%)	27 (2.8%)	14 (2.9%)	13 (2.8%)	1.0
*PUD, n(%)	7 (0.7%)	2 (0.4%)	5 (1.1%)	0.4
*Cirrhosis, n(%)	14 (1.5%)	8 (1.6%)	6 (1.3%)	0.9
*BPH, n(%)	34 (3.6%)	16 (3.3%)	18 (3.9%)	0.7
*Anxiety or depression, n(%)	21 (2.2%)	9 (1.8%)	12 (2.6%)	0.6
#Mann-Whitney U test; *Pearson's Chi-squared test				
FEV ₁ = Forced Expiratory Volume in the first second; FEV ₁ /FVC ratio = Forced Expiratory Volume in the first second divided by Forced Vital Capacity; CAT = COPD Assessment Test; mMRC = Modified Medical Research Council; CDQ = COPD Diagnostic Questionnaire; Hb = Haemoglobin; TW = Total White Blood Cell Count; PVD = Peripheral Vascular Disease; PHT = Pulmonary Hypertension; GORD = Gastro-Oesophageal Reflux Disease; PUD = Peptic Ulcer Disease; BPH = Benign Prostatic Hyperplasia;				

Supplementary Table S2. Factors associated with willingness to quit smoking in multivariable logistic regression. Odds ratios (ORs), 95% confidence intervals (CIs), and p-values are shown. Estimates were pooled from multiply imputed datasets using Rubin's rules.

Variable	OR (95% CI)	p-value
Smoking pack year	1.00 (1.00–1.01)	0.41
Age	1.01 (1.00–1.02)	0.17
Gender		
Female (Ref)		
Male	0.94 (0.55–1.61)	0.832
Highest education attained		
No formal education (Ref)		
Primary/Secondary education	3.76 (1.58–8.95)	0.003
Post-secondary education	13.03 (5.41–31.37)	<0.001
CAT score		
CAT score <10 (Ref)		
CAT score ≥10	1.95 (1.06–3.57)	0.0317
mMRC Dyspnoea scale score ≥2		
mMRC Dyspnoea scale score <2 (Ref)		
mMRC Dyspnoea scale score ≥2	1.95 (1.20–3.17)	0.007
Chronic bronchitis		
No (Ref)		
Yes	1.21 (0.76–1.92)	0.42
URTI		
URTI <2 past year (Ref)		
URTI ≥2 past year	1.08 (0.62–1.88)	0.78
Prior Smoking cessation counselling		
No (Ref)		
Prior Smoking cessation counselling	1.27 (0.94–1.73)	0.12
Respiratory related healthcare visit in the past year		
No (Ref)		
Respiratory related healthcare visit in the past year	2.38 (1.05–5.39)	0.039
Presence of IHD		
No (Ref)		
Yes	2.01 (1.43–2.83)	<0.001
Presence of CVA		
No (Ref)		
Yes	1.65 (1.02–2.67)	0.043
<i>CAT = COPD Assessment Test; mMRC = Modified Medical Research Council; IHD = Ischemic Heart Disease; CVA = Cerebrovascular Accident; URTI = Upper Respiratory Tract Infection</i>		

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	LINE
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	9
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	9-24
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	32-66
Objectives	3	State specific objectives, including any prespecified hypotheses	64-66
Methods			
Study design	4	Present key elements of study design early in the paper	69-113
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	70-113
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	70-79
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	79-110
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	79-110
Bias	9	Describe any efforts to address potential sources of bias	139-145
Study size	10	Explain how the study size was arrived at	70-72
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	123-146
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	123-146
		(b) Describe any methods used to examine subgroups and interactions	123-146
		(c) Explain how missing data were addressed	139-141
		(d) If applicable, describe analytical methods taking account of sampling strategy	NA
		(e) Describe any sensitivity analyses	141-146
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	150
		(b) Give reasons for non-participation at each stage	NA
		(c) Consider use of a flow diagram	NA
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	150-154
		(b) Indicate number of participants with missing data for each variable of interest	Table 1
Outcome data	15*	Report numbers of outcome events or summary measures	155-185
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	155-185

		(b) Report category boundaries when continuous variables were categorized	155-185, Table 1
		© If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	
.Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	186-214
Discussion			
Key results	18	Summarise key results with reference to study objectives	217-234
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	279-308
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	311-314
Generalisability	21	Discuss the generalisability (external validity) of the study results	225-272
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Not written in manuscript but part of declaration by authors.

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.