SUPPLEMENTARY MATERIAL

Supplementary Material Tables:

Table 1. Supplementary material: Demographic and clinical characteristics of EPISCAN and EPISCAN II participants by sex

Table 2. Supplementary material: Factors associated with COPD for EPISCAN and EPISCAN II. Crude and multivariate analysis

Table 3. Supplementary material: Factors associated with COPD for MEN and WOMEN. Crude and multivariate analysis

Supplementary Material Figures:

Figure 1. Supplementary material: Flowchart of the study

Figure 2. Supplementary Material: Standardised regression coefficients for the relationships between gender (women) and COPD prevalence by smoking habit

Table 1 Supplementary material. Demographic and clinical characteristics of EPISCAN and EPISCAN II participants by sex

	EPISCAN				EPISCAN II			
	Male	**Female**	*P -value*	**Test used**	**Male**	**Female**	*P -value*	**Test used**
Subjects, n (%)	324 (45.3%)	391 (54.7%)			286 (52.6%)	258 (47.4%)		
Age range, n (%)			0.706	Chi-squared			0.002	Chi-squared
40-50 yrs	106 (32.7%)	119 (30.4%)			46 (16.1%)	57 (22.1%)		
50-60 yrs	90 (27.8%)	122 (31.2%)			127 (44.4%)	75 (29.1%)		
60-70 yrs	77 (23.8%)	85 (21.7%)			67 (23.4%)	80 (31.0%)		
70-80 yrs	51 (15.7%)	65 (16.6%)			46 (16.1%)	46 (17.8%)		
Smoking history, pack-yrs mean±SD	32.5 ± 24.7	20.3 ± 16.9	<0.001	Mann-Whitney-Wilcoxon	35.0 (23.2%)	27.5 (21.5%)	<0.001	Mann-Whitney-Wilcoxon
Smoking status, n (%)			<0.001	Chi-squared			0.518	Chi-squared
Smoker	101 (31.2%)	90 (23.0%)			73 (25.5%)	67 (26.0%)		
Former smoker	137 (42.3%)	98 (25.1%)			108 (37.8%)	86 (33.3%)		
Never smoker	86 (26.5%)	203 (51.9%)			105 (36.7%)	105 (40.7%)		
Weight, kg mean±SD	81.4 ± 12.9	67.6 ± 12.6	<0.001	Mann-Whitney-Wilcoxon	82.8 (15.2)	67.1 (13.6)	<0.001	Mann-Whitney-Wilcoxon
Height, cm mean±SD	170.0 ± 7.3	158.0 ± 6.9	<0.001	t-test	174.0 (6.78)	161.0 (6.73)	<0.001	**t-test**
BMI, kg/m^{-2} mean (±SD)	28.3 ± 4.2	27.3 ± 5.0	<0.001	Mann-Whitney-Wilcoxon	27.4 (4.46)	26.0 (5.08)	<0.001	Mann-Whitney-Wilcoxon
University education, n (%)	122 (37.7%)	99 (25.3%)	<0.001	Chi-squared	238 (83.2%)	181 (70.2%)	<0.001	Chi-squared
Lives alone, n (%)	14 (13.0%)	9 (10.6%)	0.778	Chi-squared	56 (19.6%)	84 (32.6%)	<0.001	Chi-squared
Work environment with exposure to fumes, dust or other substances n (%)	142 (43.8%)	71 (18.2%)	<0.001	Chi-squared	7 (53.8%)	8 (21.6%)	0.067	Chi-squared
Previous diagnoses, n (%)								
COPD	10 (3.1%)	0 (0.0%)	0.001	Chi-squared	28 (9.8%)	38 (14.7%)	0.103	Chi-squared
Chronic bronchitis	16 (4.9%)	6 (1.5%)	0.016	Chi-squared	10 (3.5%)	10 (3.9%)	0.995	Chi-squared
Emphysema	3 (0.9%)	2 (0.5%)	0.833	Chi-squared	3 (1.1%)	1 (0.4%)	0.690	Chi-squared
Asthma	18 (5.6%)	42 (10.7%)	0.019	Chi-squared	28 (9.8%)	24 (9.3%)	0.962	Chi-squared
Symptoms, n (%)								
Cough	39 (12.1%)	32 (8.2%)	0.109	Chi-squared	37 (13.0%)	43 (16.7%)	0.275	Chi-squared
Expectoration	36 (11.1%)	27 (6.9%)	0.065	Chi-squared	41 (14.6%)	39 (15.4%)	0.900	Chi-squared

Wheezing	133 (41.2%)	149 (38.2%)	0.465	Chi-squared	100 (35.1%)	67 (26.1%)	0.020	Chi-squared
Dyspnoea	29 (9.0%)	44 (11.3%)	0.368	Chi-squared	27 (9.5%)	45 (17.4%)	0.001	Chi-squared
FVC % post-BD, ml mean±SD	96.2 ± 15.7	103.0 ± 15.3	<0.001	t-test	102.0 (17.9)	102.0 (17.1)	0.556	Mann-Whitney-Wilcoxon
FEV$_1$ % post-BD, ml mean±SD	99.3 ± 19.8	110.0 ± 17.8	<0.001	Mann-Whitney-Wilcoxon	102.0 (14.9)	104.0 (15.7)	0.234	t-test
Prevalence COPD GOLD, n(%)	57 (17.6%)	22 (5.6%)	<0.001	Chi-squared	28 (9.8%)	38 (14.7%)	0.103	Chi-squared
Prevalence LLN, n(%)	36 (11.1%)	19 (4.9%)	0.002	Chi-squared	15 (5.2%)	25 (9.7%)	0.060	Chi-squared

BMI: body mass index; **FVC:** forced vital capacity; **FEV$_1$:** forced expiratory volume in 1 s; **COPD:** chronic obstructive pulmonary disease; **GOLD:** Global Initiative for Chronic Obstructive Lung Disease **LLN**: lower limit of normal.

Table 2 Supplementary material. Factors associated with COPD for EPISCAN and EPISCAN II. Crude and multivariate analysis

Factor	Categories	EPISCAN				EPISCAN II			
		Crude		Multivariate		Crude		Multivariate	
		OR [IC 95%]	P-value	OR [IC 95%]	P-value	OR [IC 95%]	P-value	OR [IC 95%]	P-value
Age	40-49 yr (ref)	-	-	-	-	-	-	-	-
	50-59 yr	2.4 [1.1 - 5.1]	0.030	2.8 [1.2 - 6.5]	0.018	0.9 [0.4 - 2.1]	0.820	2.1 [0.2 – 35.0]	0.630
	60-69 yr	3.4 [1.6 - 7.3]	0.002	5.9 [2.5 - 14.4]	< 0.001	1.5 [0.7 - 3.2]	0.353	8.3 [0.4 - 24.3]	0.741
	70-79 yr	6.2 [2.9 - 13.4]	< 0.001	13.1 [5.2 - 33.2]	< 0.001	NA	NA	NA	NA
Gender	Male	3.6 [2.1 - 6.0]	< 0.001	3.7 [1.9 - 7.0]	< 0.001	0.6 [0.4 - 1.1]	0.080	0.7 [0.2 - 2.7]	0.160
	Female (ref.)								
Smoking status	Current	3.3 [1.8 - 6.2]	< 0.001	7.8 [3.5 - 17.3]	< 0.001	4.1 [2.0 - 8.4]	< 0.001	18.1 [0.4 - 24.9]	0.138
	Former	2.3 [1.2 - 4.2]	0.011	2.8 [1.3 - 5.9]	0.008	2.6 [1.3 - 5.2]	0.010	1.2 [0.1 - 26.2]	0.921
	Never (ref)	-	-	-	-	-	-	-	-
Education	No education	2.1 [1.0 - 4.6]	0.064	2.1 [0.8 - 5.1]	0.114	NA	NA	NA	NA
	Primary education (ref)	-	-	-	-	-	-	-	-
	Secundary education	0.6 [0.3 - 1.1]	0.080	0.6 [0.3 - 1.3]	0.217	NA	NA	NA	NA
	University education	0.7 [0.4 - 1.3]	0.293	0.7 [0.3 - 1.4]	0.269	0.4 [0.2 - 1.2]	0.114	7.7 [0.1 - 25.3]	0.339
Occupational and biomass exposure history	No (ref)	-	-	-	-	-	-	-	-
	Yes	0.7 [0.4 - 1.1]	0.156	1.5 [0.8 - 2.8]	0.262	2.6 [0.5 - 13.7]	0.259	1.7 [0.5 - 6.5]	0.121
BMI (kg/m^{-2} mean)	<21	2.7 [1.0 - 6.9]	0.043	5.4 [1.8 - 16.3]	0.003	NA	NA	NA	NA
	≥21 (ref)	-	-	-	-	-	-	-	-
YPAS	1 y 2 (ref)	-	-	-	-	-	-	-	-
	3-4	5.6 [2.5 - 12.9]	< 0.001	4.2 [1.5 - 11.6]	0.005	3.8 [1.6 - 8.8]	0.002	4.4 [0.4 - 13.2]	0.121

Data are presented as OR (95% CI). COPD is defined as postbronchodilator FEV_1 /FVC < 0.7

BMI: body mass index; YPAS: yale physical activity survey; ref= reference; NA: not available
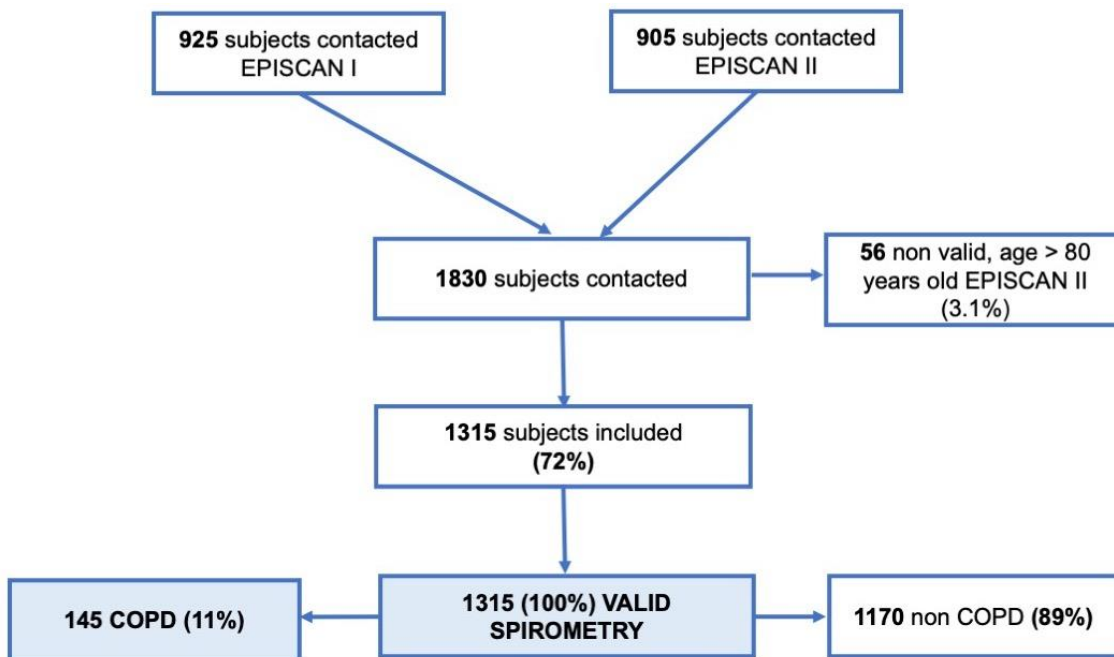
Table 3 Supplementary material. Factors associated with COPD for MEN and WOMEN. Crude and multivariate analysis

Factor	Categories	MEN				WOMEN			
		Crude		Multivariate		Crude		Multivariate	
		OR [IC 95%]	*P*-value	OR [IC 95%]	*P*-value	OR [IC 95%]	*P*-value	OR [IC 95%]	*P*-value
Age	40-49 yr (ref)	-	-	-	-	-	-	-	-
	50-59 yr	2.0 [0.9 - 4.7]	0.097	4.0 [1.3 - 12.3]	0.018	1.3[0.6 - 2.8]	0.515	2.6[0.8 - 8.4]	0.124
	60-69 yr	4.3 [1.9 - 9.9]	< 0.001	11.1 [3.3 - 37.3]	< 0.001	1.3 [0.6 - 2.8]	0.562	3.0 [0.8 - 11.6]	0.103
	70-79 yr	6.9 [3.0 - 16.1]	< 0.001	28.9 [8.2 - 102.4]	< 0.001	2.5 [1.1 - 5.4]	0.023	9.7 [2.4 - 38.3]	0.001
Smoking status	Current	4.0 [1.9 - 8.1]	< 0.001	11.5 [3.7 - 35.8]	< 0.001	3.3 [1.8 - 6.3]	< 0.001	6.3 [2.0 - 19.6]	0.001
	Former	3.2 [1.6 - 6.4]	0.001	3.1 [1.1 - 8.3]	0.028	1.4 [0.7 - 2.9]	0.324	2.8 [0.9 - 8.9]	0.081
	Never (ref)	-	-	-	-	-	-	-	-
Education	No education	2.5 [0.8 - 7.5]	0.099	2.7 [0.8 - 9.3]	0.118	2.0 [0.7 - 6.1]	0.218	2.1 [0.6 - 7.8]	0.264
	Primary education (ref)	-	-	-	-	-	-	-	-
	Secundary education	0.6 [0.3 - 1.3]	0.217	0.8 [0.3 – 2.0]	0.600	0.7 [0.2 - 1.5]	0.317	0.7 [0.2 - 2.1]	0.496
	University education	0.4 [0.2 - 0.7]	0.002	0.7 [0.3 - 1.6]	0.364	1.3 [0.7 - 2.6]	0.446	0.9 [0.3 - 2.9]	0.909
Occupational and biomass exposure history	No (ref)	-	-	-	-	-	-	-	-
	Yes	1.2 [0.7 - 2.1]	0.547	2.2 [1.0 - 4.6]	0.045	0.8 [0.3 - 1.9]	0.605	0.7 [0.3 - 2.0]	0.506
BMI (kg/m^{-2} mean)	<21	1.7 [0.6 - 4.8]	0.283	3.3 [0.6 - 19.4]	0.181	2.7 [1.3 - 5.4]	0.005	9.6 [2.7 - 34.3]	< 0.001
	≥21 (ref)	-	-	-	-	-	-	-	-
YPAS	1 y 2 (ref)	-	-	-	-	-	-	-	-
	3-4	6.9 [2.8 - 17.0]	< 0.001	4.2 [1.1 - 17.0]	0.043	4.0 [1.8 - 9.0]	< 0.001	5.7 [1.7 - 18.6]	0.004

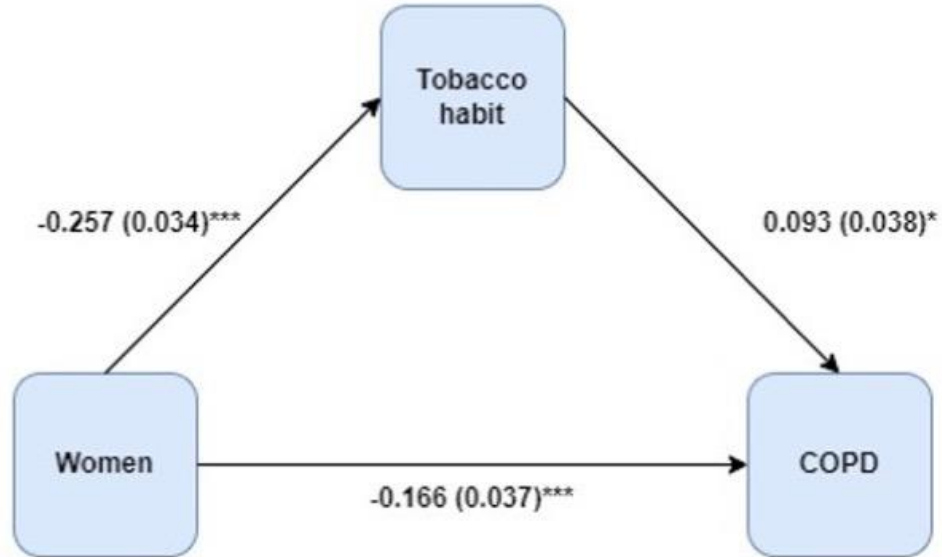Data are presented as OR (95% CI). COPD is defined as postbronchodilator FEV1 /FVC < 0.7

BMI: body mass index; YPAS: yale physical activity survey; ref= reference

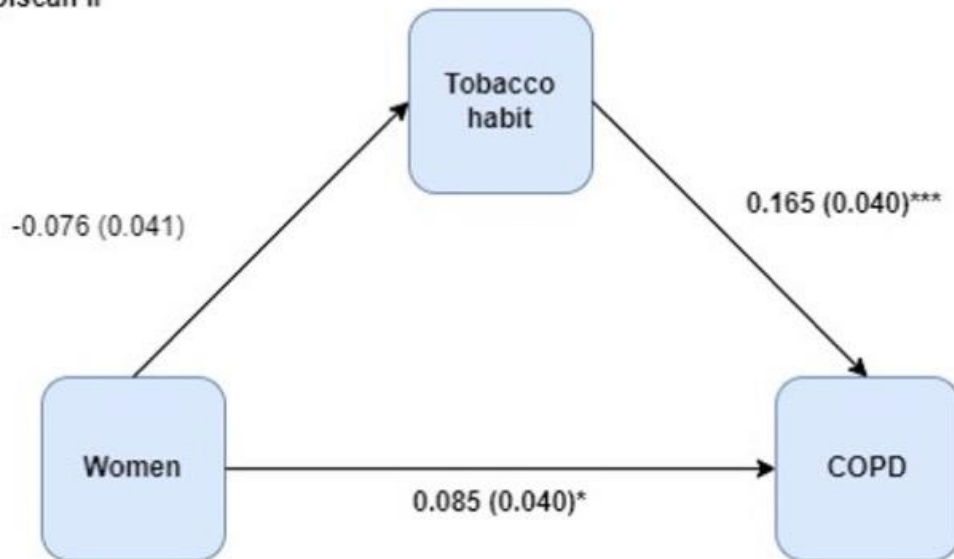**Figure 1 Supplementary material.** Flowchart of the study

Figure 2 Supplementary Material. Standardised regression coefficients for the relationships between gender (women) and COPD prevalence by smoking habit.

Episcan

Episcan II

The value of the standardized regression coefficient is shown at the middle of the arrow and the standard error in parentheses. Significant effects are shown in bold and with asterisks (p<0.05 *, p<0.01 **, p<0.001 ***)