

eTable 5. Prevalence ratio and confidence intervals for heart diseases and stroke in women

Variable	Crude Models		Model 1		Model 2	
	Heart diseases PR (95%CI)	Stroke PR (95%CI)	Heart diseases PR (95%CI)	Stroke PR (95%CI)	Heart disease PR (95%CI)	Stroke PR (95%CI)
Cardiovascular diseases						
Hypertension	0.91 (0.75-1.10)	0.78 (0.52-1.18)	1.00 (0.82-1.22)	0.83 (0.55-1.26)	1.00 (0.82-1.22)	0.85 (0.56-1.28)
Hyperlipidemia	1.68 (1.47-1.93)	1.54 (1.17-2.01)	1.48 (1.29-1.70)	1.34 (1.02-1.77)	1.48 (1.29-1.70)	1.34 (1.02-1.77)
Frequency of laughing per month						
Never or almost never	2.03 (1.58-2.61)	2.71 (1.72-4.27)	1.42 (1.08-1.85)	2.00 (1.23-3.27)	1.41 (1.08-1.85)	1.95 (1.19-3.18)
1-3 days per month	1.53 (1.21-1.92)	1.40 (0.87-2.26)	1.26 (1.00-1.59)	1.22 (0.74-1.98)	1.26 (1.00-1.59)	1.19 (0.73-1.95)
1-5 days per week	1.39 (1.20-1.61)	1.45 (1.07-1.96)	1.28 (1.10-1.48)	1.34 (0.99-1.82)	1.28 (1.10-1.49)	1.33 (0.98-1.81)
Almost everyday	Ref	Ref	Ref	Ref	Ref	Ref
Depression						
GDS score ≥ 5	1.77 (1.51-2.06)	1.71 (1.25-2.34)	1.42 (1.20-1.68)	1.26 (0.90-1.77)	1.42 (1.20-1.68)	1.25 (0.89-1.76)
GDS score < 5	Ref	Ref	Ref	Ref	Ref	Ref
Age, years						
65-69	Ref	Ref	Ref	Ref	Ref	Ref
70-74	1.92 (1.55-2.39)	1.12 (0.75-1.67)	1.84 (1.48-2.29)	1.12 (0.75-1.67)	1.84 (1.48-2.29)	1.09 (0.73-1.63)
75-79	2.45 (1.96-3.06)	1.75 (1.18-2.59)	2.21 (1.76-2.77)	1.68 (1.12-2.52)	2.22 (1.77-2.78)	1.63 (1.08-2.44)
≥ 80	3.50 (2.83-4.34)	2.32 (1.58-3.41)	2.94 (2.35-3.67)	2.07 (1.39-3.10)	2.94 (2.35-3.68)	1.96 (1.31-2.94)
Body mass index						
1st quintile	1.11 (0.89-1.38)	0.70 (0.45-1.08)	1.10 (0.88-1.38)	0.67 (0.43-1.04)	1.10 (0.88-1.38)	0.66 (0.43-1.03)
2nd quintile	0.97 (0.77-1.22)	0.65 (0.42-1.02)	0.99 (0.79-1.24)	0.66 (0.42-1.03)	0.99 (0.79-1.24)	0.66 (0.42-1.03)
3rd quintile	Ref	Ref	Ref	Ref	Ref	Ref
4th quintile	1.12 (0.90-1.39)	0.79 (0.52-1.20)	1.12 (0.90-1.40)	0.81 (0.53-1.23)	1.12 (0.90-1.40)	0.81 (0.53-1.24)
5th quintile	1.21 (0.98-1.50)	1.05 (0.71-1.55)	1.12 (0.90-1.40)	0.99 (0.66-1.46)	1.13 (0.91-1.40)	0.98 (0.66-1.46)

Missing data	1.13 (0.81-1.59)	0.95 (0.51-1.79)	0.89 (0.64-1.25)	0.75 (0.40-1.42)	0.89 (0.64-1.25)	0.74 (0.39-1.40)
Alcohol consumption						
Never or almost never	Ref	Ref	Ref	Ref	Ref	Ref
Stopped drinking	1.53 (1.03-2.28)	1.50 (0.67-3.39)	1.63 (1.08-2.46)	1.01 (0.43-2.37)	1.61 (1.07-2.44)	0.99 (0.42-2.35)
Drinking	0.69 (0.56-0.85)	0.86 (0.58-1.27)	0.80 (0.64-0.99)	0.89 (0.59-1.32)	0.80 (0.64-0.99)	0.90 (0.60-1.35)
Missing data	1.19 (0.69-2.05)	1.49 (0.55-4.03)	1.06 (0.51-2.16)	2.43 (0.74-8.01)	1.07 (0.52-2.20)	2.32 (0.71-7.63)
Smoking habit						
Never or almost never	Ref	Ref	Ref	Ref	Ref	Ref
Stopped smoking	0.85 (0.52-1.37)	2.91 (1.69-5.00)	0.85 (0.52-1.40)	3.09 (1.73-5.52)	0.85 (0.51-1.40)	3.05 (1.70-5.48)
Currently smoking	0.90 (0.62-1.33)	1.26 (0.64-2.45)	1.03 (0.69-1.52)	1.30 (0.66-2.58)	1.03 (0.69-1.52)	1.26 (0.64-2.51)
Missing data	1.28 (0.77-2.14)	0.71 (0.18-2.88)	1.08 (0.55-2.11)	0.35 (0.07-1.83)	1.08 (0.55-2.11)	0.35 (0.07-1.84)
Physical activity						
Less than once per week	1.76 (1.46-2.12)	1.82 (1.27-2.62)	1.32 (1.09-1.60)	1.36 (0.93-1.99)	1.31 (1.07-1.59)	1.30 (0.89-1.92)
Once or more per week	Ref	Ref	Ref	Ref	Ref	Ref
Missing data	1.26 (1.06-1.50)	1.15 (0.80-1.65)	1.03 (0.86-1.24)	0.97 (0.67-1.40)	1.05 (0.87-1.27)	0.88 (0.60-1.29)
Frequency of social participation per year						
1st quartile	1.54 (1.24-1.92)	2.17 (1.36-3.48)			1.03 (0.82-1.30)	1.48 (0.90-2.43)
2nd quartile	1.14 (0.89-1.47)	1.30 (0.75-2.26)			0.93 (0.72-1.20)	1.06 (0.61-1.86)
3rd quartile	1.17 (0.92-1.48)	1.44 (0.85-2.42)			1.05 (0.83-1.34)	1.32 (0.78-2.23)
4th quartile	Ref	Ref			Ref	Ref
Missing data	1.24 (1.00-1.54)	1.89 (1.19-3.01)			0.94 (0.75-1.18)	1.57 (0.97-2.54)

CI, confidence interval; GDS, Geriatric Depression Scale; PR, prevalence ratio.

In model 1, we controlled for risk factors of diseases, laughter, depression, age, body mass index, drinking habit, smoking habit, and physical activity.

In model 2, social participation was added to the variables.