

## **Supplementary Information**

The relationship between other comorbidities associated with diabetes (diabetic peripheral neuropathy, sarcopenia, stroke, heart disease, and arthritis) and higher-level functional status.

## **Article title**

Association between comorbidities associated with diabetes and higher-level functional status in older patients with type 2 diabetes mellitus – A cross sectional study

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**Supplementary Table 1. Prevalence ratio (95% confidence interval) of other comorbidities for malfunction status of TMIG-IC: determined by Poisson regression analysis**

Variables	<i>n</i>	Prevalence of TMIG-IC disability, <i>n</i> (%)	Crude model	Model 1	Model 2
			PR (95% CI)	PR (95% CI)	PR (95% CI)
Arthritis	10	3 (30.0)	1.22 (0.46–3.25)	1.27 (0.54–2.96)	0.90 (0.35–2.36)
Diabetic neuropathy	71	15 (21.1)	0.78 (0.46–1.34)	0.79 (0.51–1.24)	0.90 (0.59–1.39)
Stroke	19	5 (26.3)	1.07 (0.48–2.36)	1.10 (0.60–2.04)	0.78 (0.41–1.49)
Cardiovascular disease	25	9 (36.0)	1.55 (0.86–2.79)	0.86 (0.50–1.49)	0.84 (0.50–1.41)
Sarcopenia	18	6 (33.3)	1.38 (0.68–2.79)	1.28 (0.70–2.35)	1.00 (0.47–2.13)

TMIG-IC, Tokyo Metropolitan Institute Gerontology Index of Competence; PR, prevalence ratio; CI, confidence interval.

Model 1: adjusted for propensity score (including age, gender, use of insulin, HbA1c, BMI, self-rated health, smoking status, physical activity level, academic history, economic condition, living status, other comorbidities). Model 2: Model 1 + score of Lubben Social Network Scale-6

**Supplementary Table 2. Prevalence ratio (95% confidence interval) of other comorbidities for malfunction status of IADL: determined by Poisson regression analysis**

Variables	<i>n</i>	Prevalence of IADL disability, <i>n</i> (%)	Crude model	Model 1	Model 2
			PR (95% CI)	PR (95% CI)	PR (95% CI)
Arthritis	10	2 (20.0)	1.50 (0.41–5.48)	1.65 (0.71–3.85)	1.47 (0.63–3.47)
Diabetic neuropathy	71	8 (11.3)	0.75 (0.35–1.63)	0.77 (0.39–1.51)	0.74 (0.37–1.48)
Stroke	19	4 (21.1)	1.64 (0.63–4.24)	1.18 (0.43–3.25)	1.06 (0.39–2.91)
Cardiovascular disease	25	4 (16.0)	1.20 (0.45–3.19)	1.13 (0.51–2.50)	1.08 (0.51–2.27)
Sarcopenia	18	3 (16.7)	1.24 (0.42–3.73)	1.38 (0.61–3.15)	1.44 (0.58–3.55)

IADL, Instrumental activities of daily living; PR, prevalence ratio; CI, confidence interval.

Model 1: adjusted for propensity score (including age, gender, use of insulin, HbA1c, BMI, self-rated health, smoking status, physical activity level, academic history, economic condition, living status, other comorbidities). Model 2: Model 1 + score of Lubben Social Network Scale-6

**Supplementary Table 3. Prevalence ratio (95% confidence interval) of other comorbidities for malfunction status of intellectual activity: determined by Poisson regression analysis**

Variables	<i>n</i>	Prevalence of intellectual activity disability, <i>n</i> (%)	Crude model	Model 1	Model 2
			PR (95% CI)	PR (95% CI)	PR (95% CI)
Arthritis	10	3 (30.0)	0.55 (0.21 – 1.44)	0.52 (0.25 – 1.09)	0.50 (0.24 – 1.02)
Diabetic neuropathy	71	39 (54.9)	1.06 (0.81 – 1.38)	1.03 (0.82 – 1.30)	1.03 (0.82 – 1.30)
Stroke	19	12 (63.2)	1.22 (0.84 – 1.76)	1.12 (0.78 – 1.61)	1.08 (0.75 – 1.54)
Cardiovascular disease	25	15 (60.0)	1.15 (0.81 – 1.64)	0.92 (0.62 – 1.36)	0.91 (0.63 – 1.33)
Sarcopenia	18	6 (33.3)	0.60 (0.31 – 1.17)	0.69 (0.39 – 1.21)	0.67 (0.38 – 1.17)

PR, prevalence ratio; CI, confidence interval.

Model 1: adjusted for propensity score (including age, gender, use of insulin, HbA1c, BMI, self-rated health, smoking status, physical activity level, academic history, economic condition, living status, other comorbidities). Model 2: Model 1 + score of Lubben Social Network Scale-6

**Supplementary Table 4. Prevalence ratio (95% confidence interval) of other comorbidities for malfunction status of social role: determined by Poisson regression analysis**

Variables	<i>n</i>	Prevalence of social role disability, <i>n</i> (%)	Crude model	Model 1	Model 2
			PR (95% CI)	PR (95% CI)	PR (95% CI)
Arthritis	10	5 (50.0)	0.77 (0.41 – 1.45)	0.77 (0.42 – 1.39)	0.69 (0.38 – 1.23)
Diabetic neuropathy	71	46 (64.8)	1.02 (0.82 – 1.27)	1.01 (0.81 – 1.25)	1.02 (0.84 – 1.24)
Stroke	19	12 (63.2)	0.99 (0.69 – 1.41)	0.97 (0.67 – 1.40)	0.80 (0.57 – 1.12)
Cardiovascular disease	25	15 (60.0)	0.93 (0.66 – 1.31)	0.78 (0.54 – 1.13)	0.78 (0.58 – 1.05)
Sarcopenia	18	12 (66.7)	1.04 (0.74 – 1.47)	1.05 (0.74 – 1.47)	1.03 (0.72 – 1.49)

PR, prevalence ratio; CI, confidence interval.

Model 1: adjusted for propensity score (including age, gender, use of insulin, HbA1c, BMI, self-rated health, smoking status, physical activity level, academic history, economic condition, living status, other comorbidities). Model 2: Model 1 + score of Lubben Social Network Scale-6