

Original article

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Contribution of comorbid conditions to the association between diabetes and disability pensions: a population-based nationwide cohort study

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¹ Appendix

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Supplementary Table A. Identification of depressive disorder, other psychiatric disorders, cardiovascular disease, hypertension, and musculoskeletal disorder (8).

	<i>Register information used</i>	<i>Source of register data</i>
(a) Depressive disorder	Antidepressants (ATC code N06); ICD-10 codes F32-F34	a,b
(b) Other psychiatric disorders	Antipsychotic, neurosis, and sleeping disorder medication (ATC code N05); ICD-10 codes F00-F31, F35-F99	a,b
(c) Cardiovascular disease	Cardiovascular disease medication (ATC code C01); ICD-10 codes I20-I25, I46-I49, I60-I69	a,b
(d) Hypertension	Hypertension medication (ATC code C02); ICD-10 codes I10-I15	a,b
(e) Musculoskeletal disorders	ICD-10 codes M00-M99	b

^a Swedish Prescribed Drug Register

^b National Board of Health and Welfare: hospitalizations and specialized out-patient care

ATC=Anatomical Therapeutic Chemical

Supplementary Table B. Four-year onset and incidence rate per 1000 person years for cause-specific disability pension. Disability pension diagnoses with more than 50 cases during four year follow-up are listed.

	Diabetes (N=14 198)			No diabetes (N=39 204)		
	N of cases	%	IR ^a	N of cases	%	IR ^a
Disability pension based on mental disorder (F00-F99)	265	2	4.7	361	0.9	2.3
Disability pension based on musculoskeletal disorder (M00-M99)	203	1	3.6	238	0.6	1.5
Disability pension based on diseases of the circulatory system (I00-I99)	160	1	2.8	73	0.2	0.5
Disability pension based on injury, poisoning and certain other consequences of external causes (S00-T98)	55	0.4	1.0	58	0.1	0.4
Disability pension based on disease of the nervous system (G00-G99)	41	0.3	0.7	68	0.2	0.4
Disability pension based on neoplasms (C00-D48)	60	0.4	1.1	32	0.08	0.2
Disability pension based on endocrine, nutritional and metabolic diseases including diabetes (E00-E90)	81	0.6	1.4	4	0.01	0.03

^a incidence rate per 1000 p-y: (number of disability pension cases during four-year follow-up/4

years/number of people at risk)*1000

Supplementary Table C. Contribution of diabetes and comorbid conditions to the risk of disability pension due to mental disorders

	Model 1 ^a		Model 2 ^b		Model 3 ^c		% Attenuation ^d
	HR	95% CI	HR	95% CI	HR	95% CI	
Depression (ref=no)	.	.	.	.	6.81	5.52-8.40	
Other mental (ref=no)	.	.	.	.	4.44	3.58-5.49	
CVD (ref=no)	.	.	.	.	0.84	0.68-1.03	
Hypertension (ref=no)	.	.	.	.	1.16	0.88-1.54	
Musculoskeletal (ref=no)	.	.	.	.	1.00	0.80-1.24	
Diabetes (ref=no diabetes)	2.09	1.79-2.45	2.02	1.70-2.41	1.17	0.98-1.40	
Model 2 vs Model 1							15
Model 3 vs Model 1							79
Model 3 vs Model 2							67

^a Unadjusted

^b Adjusted for sex, age, education, type of living area, family situation, and birth country

^c Adjusted as Model 2 and additionally for other conditions

^d Attenuation percentage (Model 2 vs Model 1): $100 \times (B_{\text{Model 1}} - B_{\text{Model 2}}) / (B_{\text{Model 1}})$

Supplementary Table D. Contribution of diabetes and comorbid conditions to the risk of disability pension due to musculoskeletal disorders.

	Model 1 ^a		Model 2 ^b		Model 3 ^c		% Attenuation ^d
	HR	95% CI	HR	95% CI	HR	95% CI	
Depression (ref=no)	.	.	.	.	2.21	1.75-2.79	
Other mental (ref=no)	.	.	.	.	1.13	0.90-1.43	
CVD (ref=no)	.	.	.	.	0.80	0.62-1.05	
Hypertension (ref=no)	.	.	.	.	0.84	0.60-1.18	
Musculoskeletal (ref=no)	.	.	.	.	5.34	4.37-6.53	
Diabetes (ref=no diabetes)	2.42	2.01-2.92	1.59	1.31-1.94	1.37	1.12-1.67	
Model 2 vs Model 1							47
Model 3 vs Model 1							65
Model 3 vs Model 2							33

^a Unadjusted

^b Adjusted for sex, age, education, type of living area, family situation, and birth country

^c Adjusted as Model 2 and additionally for other conditions

^d Attenuation percentage (Model 2 vs Model 1): $100 \times (B_{\text{Model 1}} - B_{\text{Model 2}}) / (B_{\text{Model 1}})$

Supplementary Table E. Contribution of diabetes and comorbid conditions to the risk of disability pension due to diseases of the circulatory system.

	Model 1 ^a		Model 2 ^b		Model 3 ^c		% Attenuation ^d
	HR	95% CI	HR	95% CI	HR	95% CI	
Depression (ref=no)	.	.	.	.	1.83	1.31-2.55	
Other mental (ref=no)	.	.	.	.	0.97	0.70-1.35	
CVD (ref=no)	.	.	.	.	7.36	5.32-10.19	
Hypertension (ref=no)	.	.	.	.	2.78	2.03-3.82	
Musculoskeletal (ref=no)	.	.	.	.	0.77	0.53-1.12	
Diabetes (ref=no diabetes)	9.75	7.04-13.5	5.99	4.25-8.44	3.30	2.30-4.72	
Model 2 vs Model 1							21
Model 3 vs Model 1							48
Model 3 vs Model 2							33

^a Unadjusted

^b Adjusted for sex, age, education, type of living area, family situation, and birth country

^c Adjusted as Model 2 and additionally for other conditions

^d Attenuation percentage (Model 2 vs Model 1): $100 \times (B_{\text{Model 1}} - B_{\text{Model 2}}) / (B_{\text{Model 1}})$