

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Sociodemographic Characteristics at Baseline (2000-2001)

Characteristic	Total population (N=6,587,036), No. (%)	Bipolar disorder (n=6618), No. (%)
Sex		
Women	3,365,312 (51.1)	3,918 (59.2)
Men	3,221,724 (48.9)	2,700 (40.8)
Age (years)		
20-29	1,022,381 (15.5)	452 (6.8)
30-39	1,209,250 (18.4)	858 (13.0)
40-49	1,127,794 (17.1)	1,276 (19.3)
50-59	1,209,401 (18.4)	1,711 (25.8)
60-69	845,540 (12.8)	1,207 (18.2)
70-79	676,662 (10.3)	786 (11.9)
≥80	496,008 (7.5)	328 (5.0)
Marital status		
Married/cohabiting	2,981,015 (45.3)	2,168 (32.8)
Never married	2,310,839 (35.1)	2,304 (34.8)
Divorced/widowed	1,245,722 (18.9)	2,143 (32.4)
Unknown	49,460 (0.7)	3 (<0.1)
Education level (years)		
Compulsory HS or less (≤9)	1,287,367 (19.5)	1,581 (23.9)
Practical or some theoretical HS (10-11)	1,722,028 (26.1)	1,983 (30.0)
Theoretical HS and/or college (≥12)	2,755,468 (41.8)	2,427 (36.7)
Unknown	822,173 (12.5)	627 (9.5)
Employment status		
Employed	3,934,261 (59.7)	2,016 (30.5)
Non-employed	2,652,775 (40.3)	4,602 (69.5)
Income		
Highest quartile	1,634,346 (24.8)	1,008 (15.2)
2 nd quartile	1,633,239 (24.8)	1,715 (25.9)
3 rd quartile	1,635,496 (24.8)	2,263 (34.2)
Lowest quartile	1,634,505 (24.8)	1,629 (24.6)
Unknown	49,450 (0.8)	3 (<0.1)
Alcohol use disorder^a	118,715 (1.8)	806 (12.2)
Other substance use disorders^b	70,386 (1.1)	649 (9.8)

Abbreviation: HS = high school.

^aAny outpatient or inpatient diagnosis of alcohol use disorder (*ICD-10* code F10) in 2001-2009.

^bAny outpatient or inpatient diagnosis of other substance use disorders (*ICD-10* codes F11-F19) in 2001-2009.

eTable 2. Hazard Ratios for Association Between Bipolar Disorder (2001-2002) and Diagnosis With Selected Conditions (2003-2009)

Morbidities (ICD-10 codes)	Total population (N=6,587,036)	Bipolar disorder (N=6,618)	Adjusted for age	Adjusted for age and other sociodemographics^a	Adjusted for age, other sociodemographics^a- and substance use disorders^b
	Cases (% by sex)	Cases (% by sex)	HR (95% CI)	HR (95% CI)	HR (95% CI)
Cardiovascular disease (I00-I99)					
Women	772,058 (22.9)	1216 (31.0)	1.41 (1.33-1.49)	1.32 (1.24-1.39)	1.19 (1.13-1.26)
Men	748,620 (23.2)	851 (31.5)	1.34 (1.25-1.43)	1.24 (1.16-1.32)	1.09 (1.02-1.16)
Hypertension (I10)					
Women	373,645 (11.1)	455 (11.6)	1.00 (0.92-1.10)	0.94 (0.85-1.03)	0.85 (0.77-0.93)
Men	336,840 (10.5)	309 (11.4)	1.00 (0.89-1.12)	0.94 (0.84-1.05)	0.83 (0.74-0.93)
Ischemic heart disease (I20-I25)					
Women	188,367 (5.6)	258 (6.6)	1.22 (1.08-1.38)	1.11 (0.99-1.26)	1.00 (0.89-1.13)
Men	253,216 (7.9)	249 (9.2)	1.13 (1.00-1.28)	1.03 (0.91-1.17)	0.93 (0.82-1.05)
Stroke (I60-I66)					
Women	108,675 (3.2)	197 (5.0)	1.70 (1.47-1.95)	1.57 (1.36-1.80)	1.40 (1.21-1.61)
Men	112,001 (3.5)	129 (4.8)	1.39 (1.17-1.65)	1.25 (1.05-1.48)	1.08 (0.91-1.28)
Cancer (C00-C97)					
Women	283,899 (8.4)	394 (10.1)	1.10 (1.00-1.22)	1.08 (0.98-1.20)	1.06 (0.96-1.17)
Men	285,174 (8.9)	254 (9.4)	1.00 (0.88-1.13)	0.99 (0.87-1.12)	0.97 (0.85-1.09)
Diabetes mellitus (E10-E14)					
Women	159,869 (4.8)	383 (9.8)	2.02 (1.83-2.23)	1.70 (1.54-1.88)	1.58 (1.43-1.74)
Men	193,746 (6.0)	323 (12.0)	1.88 (1.68-2.09)	1.59 (1.43-1.78)	1.45 (1.30-1.62)
Lipid disorders (E78)					
Women	80,954 (2.4)	107 (2.7)	0.98 (0.81-1.19)	0.90 (0.75-1.09)	0.79 (0.65-0.96)
Men	114,037 (3.5)	100 (3.7)	0.89 (0.73-1.09)	0.87 (0.71-1.05)	0.77 (0.64-0.94)
Chronic obstructive pulmonary disease (J41-J44)					
Women	69,995 (2.1)	231 (5.9)	2.68 (2.36-3.05)	2.07 (1.82-2.36)	1.40 (1.23-1.60)
Men	67,921 (2.1)	119 (4.4)	2.08 (1.73-2.49)	1.66 (1.39-1.99)	1.19 (0.99-1.43)
Influenza or pneumonia (J09-J18)					
Women	125,067 (3.7)	341 (8.7)	2.65 (2.38-2.94)	2.35 (2.11-2.61)	1.92 (1.73-2.14)
Men	134,324 (4.2)	222 (8.2)	2.21 (1.94-2.53)	1.87 (1.64-2.13)	1.51 (1.32-1.72)
Any of the above					
Women	839,083 (24.9)	1,416 (36.1)	1.53 (1.45-1.61)	1.42 (1.35-1.50)	1.28 (1.21-1.35)
Men	826,616 (25.7)	972 (36.0)	1.44 (1.35-1.53)	1.32 (1.24-1.41)	1.16 (1.09-1.24)

Abbreviations: CI = confidence interval, HR = hazard ratio, *ICD* = *International Classification of Diseases*.

^aOther sociodemographic variables included marital status, education, employment status, and income.

^bSubstance use disorders included any outpatient or inpatient diagnosis of a substance use disorder.

eTable 3. Standardized Mortality Ratios for Association Between Bipolar Disorder (2001-2002) and Selected Cause-Specific Mortality (2003-2008)

Cause of death (<i>ICD-10</i> codes)	Total population (N=6,587,036)	Bipolar disorder (N=6,618)	Adjusted for age and smoking	Adjusted for age, other sociodemographics ^a , and smoking	Adjusted for age, other sociodemographics ^a , smoking and other substance use disorders ^b
	Deaths (% of all deaths by sex)	Deaths (% of all deaths by sex)	SMR (95% CI)	SMR (95% CI)	SMR (95% CI)
Ischemic heart disease (I20-I25)					
Women	48,312 (17.4)	89 (14.2)	1.91 (1.56-2.36)	1.82 (1.48-2.25)	1.75 (1.42-2.16)
Men	56,062 (21.7)	92 (20.4)	2.06 (1.68-2.53)	1.74 (1.42-2.13)	1.62 (1.32-1.99)
Stroke (I60-I66)					
Women	20,924 (7.5)	48 (7.7)	2.27 (1.71-3.01)	2.19 (1.65-2.91)	2.13 (1.60-2.83)
Men	14,560 (5.6)	18 (4.0)	1.57 (0.99-2.49)	1.37 (0.86-2.17)	1.29 (0.82-2.06)
Influenza or pneumonia (J09-J18)					
Women	7,546 (2.7)	19 (3.0)	3.07 (1.96-4.82)	3.16 (2.01-4.96)	2.98 (1.90-4.68)
Men	6,496 (2.5)	18 (4.0)	4.23 (2.66-6.72)	3.67 (2.31-5.84)	3.34 (2.10-5.31)
Chronic obstructive pulmonary disease (J41-J44)					
Women	7,483 (2.7)	29 (4.6)	3.12 (2.17-4.50)	2.48 (1.72-3.57)	1.80 (1.25-2.60)
Men	7,585 (2.9)	17 (3.8)	2.83 (1.76-4.56)	2.31 (1.43-3.72)	1.89 (1.17-3.05)

Abbreviations: CI = confidence interval, SMR = standardized mortality ratio, *ICD* = *International Classification of Diseases*.

^aOther sociodemographic variables included marital status, education, employment status, and income.

^bSubstance use disorders included any outpatient or inpatient diagnosis of a substance use disorder.