

**Supplementary Table 1.** Description of ATC-codes used to identify chronic diseases among unemployed (n=507,583) and employed (n=4,566,644) persons.

Chronic disease	ATC-code	Medication class	Prevalence (%) Unemployed	Prevalence (%) Employed
<b>Cardiovascular disease</b>	B01A	Antithrombotic agents	8.5	3.2
	C01	Cardiac agents	1.9	0.7
	C03A	Low-ceiling drugs	3.8	1.5
	C08	Calcium channel blockers	5.4	1.9
	C07	Beta blocking agents	9.6	3.7
	C09A, C09B	ACE inhibitors	7.0	2.8
<b>Psychological disorders</b>	N05B	Anxiolytics	6.0	0.9
	N05C	Hypnotics and sedatives	3.4	0.4
	N06A	Antidepressants	14.4	5.0
<b>Inflammatory and antirheumatic products</b>	M01A	Anti-inflammatory and antirheumatic products, non-steroids	24.5	15.8
<b>Respiratory diseases</b>	R03A, R03C	Adrenergics (inhalants)	10.5	5.8
	R03B, R03D	Other drugs for obstructive airway diseases	4.8	2.3
<b>Psychotic illness</b>	N05A	Antipsychotics	6.2	0.8
<b>Diabetes mellitus</b>	A10A	Insulins and analogues	2.5	0.8
	A10B	Blood glucose lowering drugs	6.4	1.5

**Supplementary Table 2.** Combinations and prevalence of multimorbidity of four chronic diseases among unemployed (n=507,583) and employed (n=4,566,644) persons.

Combination	Chronic disease				Prevalence	
	Cardiovascular diseases (CVD)	Psychological disorders (PD)	Inflammatory conditions (IC)	Respiratory diseases (RD)	N (%) Unemployed	N (%) Employed
<b>1</b>	1	0	0	0	49,124 (9.7)	248,948 (5.5)
<b>2</b>	0	1	0	0	38,549 (7.6)	137,314 (3.0)
<b>3</b>	0	0	1	0	64,535 (12.7)	524,452 (11.5)
<b>4</b>	0	0	0	1	19,832 (3.9)	181,148 (4.0)
<b>5</b>	1	0	0	1	8,611 (1.7)	28,834 (0.6)
<b>6</b>	1	0	1	0	15,533 (3.1)	72,591 (1.6)
<b>7</b>	1	1	0	0	12,046 (2.4)	25,049 (0.5)
<b>8</b>	0	1	1	0	18,098 (3.6)	45,499 (1.0)
<b>9</b>	0	0	1	1	9,124 (1.8)	46,741 (1.0)
<b>10</b>	0	1	0	1	6,699 (1.3)	14,651 (0.3)
<b>11</b>	1	1	1	0	5,995 (1.2)	11,376 (0.2)
<b>12</b>	0	1	1	1	4,683 (0.9)	7,041 (0.2)
<b>13</b>	1	1	0	1	4,165 (0.8)	4,798 (0.1)
<b>14</b>	1	0	1	1	3,722 (0.7)	10,812 (0.2)
<b>15</b>	1	1	1	1	2,721 (0.5)	2,792 (0.1)

**Supplementary Table 3.** The association of employment status with multimorbidity stratified by age.

	<b>Chronic diseases</b>		
	<b>1</b>	<b>2</b>	<b>≥3</b>
	<b>OR ( 95% CI)</b>		
<i>Employment status (n=5,074,227)</i>			
Employed	1	1	1
Unemployed	1.30 (1.29-1.31)	1.74 (1.73-1.76)	2.59 (2.56-2.61)
<i>Age 18-30 (n=1,278,018)</i>			
Employed	1	1	1
Unemployed	1.65 (1.61-1.69)	2.84 (2.75-2.93)	5.20 (4.99-5.42)
<i>Age 30-45 (n=1,965,512)</i>			
Employed	1	1	1
Unemployed	1.41 (1.39-1.43)	2.12 (2.09-2.16)	3.52 (3.45-3.59)
<i>Age 45-55 (n=1,180,955)</i>			
Employed	1	1	1
Unemployed	1.22 (1.20-1.23)	1.64 (1.61-1.67)	2.66 (2.62-2.70)
<i>Age 55-65 (n=649,742)</i>			
Employed	1	1	1
Unemployed	1.09 (1.07-1.11)	1.29 (1.26-1.31)	1.78 (1.76-1.81)

Logistic regression analyses were adjusted for sex, educational level and migration background.

**Supplementary Figure 1.** Prevalence of medicines for psychological disorders (a and b) and cardiovascular diseases (c and d) by age among unemployed ( $n=507,583$ ) and employed ( $n=4,566,644$ ) persons in 2016.

