

Supplemental Tabel 1. Use of psychotropic medications in the past 12 months in adults with or without Excessive Sleepiness in the NCS-R part II sample (n=5,692)

OUTCOME: Use of psychotropic medication in the past 12 months	N of respondents reported use	Excessive Sleepiness		OR (95% CI) <sup>1</sup>	OR (95% CI) <sup>2</sup>	OR (95% CI) <sup>3</sup>	OR (95% CI) <sup>4</sup>
		No	Yes				
		% (SE)	% (SE)	(Reference: No Excessive Sleepiness)			
Antidepressant	852	7.6 (0.4)	18.9 (1.1)	<b>2.83 (2.45 - 3.27)</b>	<b>2.73 (2.31 - 3.24)</b>	<b>1.77 (1.43 - 2.19)</b>	<b>1.50 (1.20 - 1.87)</b>
Antipsychotic	99	0.9 (0.2)	1.9 (0.4)	2.10 (1.36 - 3.24)	1.97 (1.25 - 3.09)	0.87 (0.51 - 1.47)	0.86 (0.48 - 1.54)
Stimulant	38	0.4 (0.1)	0.9 (0.2)	2.33 (1.32 - 4.14)	2.01 (1.13 - 3.59)	1.56 (0.82 - 2.95)	1.41 (0.64 - 3.09)
Mood stabilizer/ anticonvulsant	109	0.8 (0.1)	2.5 (0.4)	3.22 (1.99 - 5.23)	2.77 (1.69 - 4.56)	1.62 (0.93 - 2.81)	1.43 (0.77 - 2.66)
Sedative	153	1.3 (0.3)	3.4 (0.5)	2.68 (1.68 - 4.26)	2.50 (1.58 - 3.94)	1.33 (0.84 - 2.10)	1.13 (0.71 - 1.80)
Z drug	107	1.1 (0.1)	2.4 (0.3)	2.28 (1.55 - 3.37)	2.29 (1.57 - 3.35)	1.34 (0.86 - 2.08)	0.90 (0.56 - 1.46)
Benzo	401	3.7 (0.4)	8.5 (0.7)	2.42 (1.91 - 3.07)	2.33 (1.81 - 3.00)	1.50 (1.15 - 1.95)	1.19 (0.87 - 1.62)
Non-Benzo	41	0.2 (0.1)	1.1 (0.2)	5.21 (2.92 - 9.30)	4.80 (2.69 - 8.55)	2.78 (1.46 - 5.27)	2.46 (1.24 - 4.86)
Barbiturate	3	0.0 (0.0)	0.2 (0.1)	-	-	-	-
Other	31	0.4 (0.1)	0.8 (0.2)	2.25 (0.94 - 5.39)	2.36 (1.01 - 5.52)	2.05 (0.78 - 5.39)	2.12 (0.73 - 6.18)
<b>Any medication</b>	<b>1244</b>	<b>11.7 (0.5)</b>	<b>26.4 (1.3)</b>	<b>2.70 (2.34 - 3.10)</b>	<b>2.68 (2.30 - 3.12)</b>	<b>1.75 (1.48 - 2.08)</b>	<b>1.42 (1.17 - 1.73)</b>

NOTE: % (SE) = prevalence (standard error); OR(95% CI) = Odds ratio and 95% confidence interval; <sup>1</sup> = univariate; <sup>2</sup> = adjusted for demographic characteristics (sex, age, race/ethnicity, family income, employment status); <sup>3</sup> = additionally adjusted for 12-month DSM-IV mental disorders; <sup>4</sup> = additionally adjusted for insomnia; - = not available due to small n; Figures in bold represent significant findings.

**Supplemental Table 2. Past-year DSM-IV mental disorders in adults with or without Ex.S in the NCS-R part II sample (n=5,692)**

OUTCOME: 12-month DSM-IV Mental Disorder	N of respondents with mental disorder	Ex.S		OR (95% CI)		
		No	Yes	1	2	3
		% (SE)	% (SE)	(Reference: No Ex.S)		
Anxiety Disorders	1482	11.0 (0.6)	33.9 (1.5)	<b>3.89 (3.27 - 4.62)</b>	<b>2.78 (2.34 - 3.31)</b>	<b>2.11 (1.76 - 2.54)</b>
Behavior Disorders	240	1.8 (0.2)	7.1 (0.7)	<b>3.85 (2.85 - 5.20)</b>	<b>2.11 (1.52 - 2.93)</b>	<b>1.66 (1.21 - 2.27)</b>
Eating Disorders	90	0.8 (0.1)	2.0 (0.3)	<b>2.29 (1.40 - 3.73)</b>	1.32 (0.78 - 2.21)	0.91 (0.53 - 1.59)
Mood Disorders	822	5.0 (0.3)	20.4 (1.1)	<b>4.45 (3.60 - 5.50)</b>	<b>2.72 (2.18 - 3.39)</b>	<b>2.05 (1.61 - 2.61)</b>
Substance Use Disorders	966	11.0 (0.7)	21.3 (1.2)	<b>2.06 (1.67 - 2.54)</b>	<b>1.56 (1.27 - 1.91)</b>	<b>1.37 (1.11 - 1.70)</b>
<b>Any Mental Disorder</b>	2406	22.5 (0.9)	52.0 (1.8)	<b>3.57 (3.02 - 4.21)</b>	<b>3.57 (3.02 - 4.21)</b>	<b>2.49 (2.11 - 2.94)</b>

NOTE: Ex.S= Excessive sleepiness plus associated symptoms; % (SE) = prevalence (standard error); OR(95% CI) = Odds ratio and 95% confidence interval; 1 = adjusted for demographic characteristics (sex, age, race/ethnicity, family income, employment status); 2 = additionally adjusted for any other 12-month DSM-IV mental disorders; 3 = additionally adjusted for insomnia symptoms; Anxiety = any of agoraphobia, generalized anxiety disorder, social phobia, specific phobia, panic disorder, post traumatic stress disorder, separation anxiety disorder; Behavior = any of attention deficit hyperactivity disorder, conduct disorder, oppositional defiant disorder; Eating = any of anorexia, bulimia, binge eating; Mood = any of major depressive disorder, dysthymia, bipolar I or II; Substance use = any of alcohol abuse/dependence, drug abuse/dependence, nicotine dependence. Numbers in bold represent significant findings.

**Supplemental Table 3. Physical conditions in adults with or without Ex.S in the NCS-R part II sample (n=5,692)**

OUTCOME: physical condition	N of respondents with physical disorders	ES <sup>+</sup>		OR (95% CI)		
		No	Yes	1	2	3
		% (SE)	% (SE)	(Reference: No Ex.S)		
Chronic pain	2200	29.0 (0.8)	48.4 (2.1)	<b>2.43 (1.98 - 2.99)</b>	<b>2.04 (1.62 - 2.56)</b>	<b>1.58 (1.23 - 2.02)</b>
Stroke	150	2.5 (0.4)	3.3 (0.4)	<b>1.57 (1.04 - 2.37)</b>	1.32 (0.87 - 2.01)	1.17 (0.73 - 1.85)
Heart Attack	186	3.4 (0.4)	4.4 (0.8)	<b>1.62 (1.04 - 2.54)</b>	1.44 (0.89 - 2.34)	1.36 (0.79 - 2.34)
Heart Disease	315	4.3 (0.4)	7.2 (0.8)	<b>2.17 (1.59 - 2.95)</b>	<b>1.94 (1.42 - 2.64)</b>	<b>1.81 (1.30 - 2.51)</b>
Hypertension	1379	22.7 (0.8)	28.4 (1.7)	<b>1.73 (1.38 - 2.18)</b>	<b>1.58 (1.26 - 1.97)</b>	<b>1.42 (1.14 - 1.78)</b>
Chronic lung disease	147	1.8 (0.2)	3.5 (0.5)	<b>1.98 (1.34 - 2.91)</b>	<b>1.64 (1.04 - 2.59)</b>	1.29 (0.85 - 1.95)
Diabetes	413	6.5 (0.4)	9.3 (0.9)	<b>1.76 (1.37 - 2.26)</b>	<b>1.74 (1.35 - 2.23)</b>	<b>1.66 (1.32 - 2.07)</b>
Epilepsy	135	1.6 (0.3)	2.5 (0.4)	1.42 (0.87 - 2.32)	1.33 (0.79 - 2.23)	1.21 (0.66 - 2.21)
Cancer	383	6.4 (0.6)	7.1 (0.8)	1.22 (0.87 - 1.70)	1.12 (0.79 - 1.58)	0.98 (0.64 - 1.48)
<b>Any physical condition</b>	3244	49.3 (1.0)	66.2 (2.0)	<b>2.64 (2.06 - 3.39)</b>	<b>2.17 (1.66 - 2.83)</b>	<b>1.67 (1.26 - 2.21)</b>

NOTE: Ex.S= Excessive sleepiness plus associated symptoms; % (SE) = prevalence (standard error); OR(95% CI) = Odds ratio and 95% confidence interval; 1 = adjusted for demographic characteristics (sex, age, race/ethnicity, family income, employment status); 2= additionally adjusted for any other 12-month DSM-IV mental disorders; 3 = additionally adjusted for insomnia symptoms; Physical conditions reported based on a checklist. Numbers in bold represent significant findings.

Supplement Table 4. Associations of excessive sleepiness and past-year DSM-IV mental disorders, physical condition and WHODAS-II domain scores in the NCS-R part II sample (n=5,692)

Past year DSM-IV disorder, physical condition, and WHODAS-II domain	5-level categorical excessive sleepiness				
	Daytime Sleepiness				No daytime sleepiness & no Ex.S sxs
	with no other Ex.S sxs	with any 1 Ex.S sxs	with any 2 Ex.S sxs	with all 3 Ex.S sxs	
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	
Anxiety	<b>1.29 (1.03 - 1.61)</b>	<b>1.69 (1.36 - 2.09)</b>	<b>2.41 (1.86 - 3.13)</b>	<b>2.88 (2.28 - 3.64)</b>	Reference
Behavior	0.64 (0.35 - 1.16)	0.95 (0.63 - 1.44)	1.51 (0.95 - 2.41)	1.79 (1.00 - 3.20)	Reference
Eating	0.58 (0.19 - 1.75)	0.60 (0.25 - 1.43)	0.72 (0.31 - 1.67)	0.80 (0.30 - 2.14)	Reference
Mood	1.09 (0.75 - 1.58)	<b>1.74 (1.25 - 2.43)</b>	<b>2.13 (1.57 - 2.88)</b>	<b>2.21 (1.40 - 3.47)</b>	Reference
Substance Use	1.33 (0.97 - 1.83)	<b>1.41 (1.13 - 1.77)</b>	<b>1.70 (1.21 - 2.39)</b>	1.38 (0.95 - 2.01)	Reference
<b>Any Mental disorder</b>	1.34 (1.00 - 1.80)	<b>1.94 (1.60 - 2.34)</b>	<b>3.10 (2.46 - 3.89)</b>	<b>3.32 (2.58 - 4.28)</b>	Reference
Chronic pain	<b>1.45 (1.13 - 1.86)</b>	<b>1.40 (1.09 - 1.80)</b>	<b>2.17 (1.36 - 3.48)</b>	<b>1.84 (1.37 - 2.48)</b>	Reference
Stroke	0.71 (0.38 - 1.33)	1.08 (0.55 - 2.12)	1.04 (0.55 - 1.98)	0.79 (0.28 - 2.18)	Reference
Heart Attack	0.80 (0.37 - 1.71)	1.40 (0.62 - 3.15)	1.24 (0.70 - 2.19)	0.85 (0.32 - 2.24)	Reference
Heart Disease	0.90 (0.54 - 1.51)	1.44 (0.94 - 2.21)	<b>2.14 (1.25 - 3.67)</b>	1.46 (0.73 - 2.93)	Reference
Hypertension	1.22 (0.83 - 1.81)	<b>1.44 (1.06 - 1.95)</b>	<b>1.48 (1.10 - 1.99)</b>	1.31 (0.92 - 1.85)	Reference
Chronic lung disease	0.85 (0.33 - 2.22)	1.17 (0.59 - 2.32)	1.18 (0.59 - 2.36)	1.20 (0.59 - 2.47)	Reference
Diabetes	0.91 (0.53 - 1.58)	<b>1.48 (1.02 - 2.16)</b>	<b>1.87 (1.21 - 2.88)</b>	1.17 (0.64 - 2.16)	Reference
Epilepsy	0.55 (0.24 - 1.23)	0.49 (0.22 - 1.12)	<b>2.21 (1.05 - 4.64)</b>	0.80 (0.37 - 1.74)	Reference
Cancer	1.18 (0.73 - 1.92)	0.85 (0.45 - 1.62)	1.14 (0.70 - 1.87)	1.17 (0.69 - 1.98)	Reference
<b>Any physical condition</b>	<b>1.91 (1.36 - 2.66)</b>	<b>1.58 (1.15 - 2.15)</b>	<b>2.19 (1.38 - 3.46)</b>	<b>1.90 (1.31 - 2.75)</b>	Reference
Self-Care	0.82 (0.46 - 1.47)	0.75 (0.36 - 1.58)	1.38 (0.70 - 2.74)	1.80 (0.99 - 3.27)	Reference
Mobility	0.72 (0.37 - 1.39)	1.17 (0.61 - 2.24)	<b>2.26 (1.32 - 3.88)</b>	<b>2.43 (1.32 - 4.48)</b>	Reference
Cognition	0.69 (0.43 - 1.09)	1.22 (0.80 - 1.86)	1.46 (0.89 - 2.39)	<b>2.92 (1.86 - 4.60)</b>	Reference
Social interaction	0.70 (0.43 - 1.16)	1.24 (0.73 - 2.12)	<b>1.86 (1.07 - 3.25)</b>	<b>2.90 (1.81 - 4.63)</b>	Reference
Role impairment	0.89 (0.56 - 1.42)	1.06 (0.70 - 1.61)	<b>1.64 (1.22 - 2.21)</b>	<b>1.98 (1.21 - 3.22)</b>	Reference
<b>Global score</b>	0.91 (0.47 - 1.73)	0.76 (0.46 - 1.25)	<b>1.71 (1.04 - 2.82)</b>	<b>2.25 (1.16 - 4.37)</b>	Reference

NOTE: % (SE) = prevalence (standard error); OR(95% CI) = Odds ratio and 95% confidence interval, using 5-level excessive sleepiness as dependent variable, mental disorders, physical conditions, WHODAS-II domain variables as independent variable in multinomial logistic regression models, fully controlling for demographic characteristics (sex, age, race/ethnicity, family income, employment status, BMI), past-year DSM-IV mental disorders, insomnia, and use of any psychotropic medication; Ex.S sxs= Excessive sleepiness and associated symptoms that included tendency to fall asleep in permissive situations, not slept enough despite spending enough time in bed, and difficulty getting up in the morning. Numbers in bold represent significant findings