

Supplementary Table A. Categories of prescription medications considered as covariates in regression modeling.

Opioids	Benzodiazepines	“Z” Drugs	Barbiturates	Other Sedatives	Stimulants
Buprenorphine	Alprazolam	Eszopiclone	Amobarbital	Agomelatine	Amphetamine
Codeine	Chlordiazepoxide	Zaleplon	Butabarbital	Amitriptyline	Armodafinil
Fentanyl	Clobazam	Zolpidem	Butalbital	Diphenhydramine	Caffeine
Hydrocodone	Clonazepam	Zopiclone	Phenobarbital	Dimenhydrinate	Dexmethylphenidate
Hydromorphone	Clorazepate		Secobarbital	Doxepin	Dextroamphetamine
Meperidine	Diazepam			Doxylamine	Methylphenidate
Methadone	Estazolam			Gabapentin	Modafinil
Morphine	Flurazepam			Melatonin	Pitolisant
Oxycodone	Lorazepam			Mirtazapine	Sodium oxybate
Oxymorphone	Oxazepam			Olanzapine	Solriamfetol
Tapentadol	Quazepam			Pregabalin	
	Temazepam			Quetiapine	
	Triazolam			Ramelteon	
				Suvorexant	
				Tasimelteon	
				Trazodone	

Agents and categories were selected for inclusion in regression model based on biologic plausibility and evidence of effect on sleep duration and use for sleeping disorders.

Supplementary Table B. Multinomial regression model for the association between cannabis use in the past 30 days and the extremes of nightly sleep duration.

	Short sleep (<6 h per night)				Long sleep (>9 h per night)				
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Recent cannabis use	1.34	1.12	1.59	<0.001	1.56	1.25	1.96	<0.001	
Age in years									
20–29	1 (reference)				1 (reference)				
30–39	1.22	1.06	1.41	<0.01	0.63	0.46	0.84	<0.01	
40–49	1.23	1.05	1.44	<0.01	0.39	0.30	0.51	<0.001	
50–59	1.12	0.94	1.34	0.18	0.40	0.31	0.52	<0.001	
Sex									
Male	1 (reference)				1 (reference)				
Female	0.96	0.86	1.07	0.42	1.36	1.11	1.68	<0.01	
Ethnicity									
Hispanic	1 (reference)				1 (reference)				
White	0.82	0.71	0.94	<0.01	0.85	0.66	1.09	0.178	
Black	2.09	1.82	2.41	<0.001	1.25	1.03	1.52	0.02	
Other	1.03	0.83	1.28	0.78	0.96	0.72	1.28	0.78	
Education beyond high school	0.76	0.66	0.87	<0.001	0.54	0.43	0.67	<0.001	
Hours worked per week									
≤ 20	1 (reference)				1 (reference)				
21–40	1.01	0.80	1.28	0.93	0.57	0.40	0.82	<0.01	
41–80	1.43	1.10	1.85	<0.01	0.29	0.19	0.44	<0.001	
>80	4.71	2.91	7.63	<0.001	0.29	0.01	5.58	0.39	
Missing data	1.28	0.97	1.68	0.07	1.69	1.23	2.33	<0.001	
Hypertension	1.29	1.15	1.44	<0.001	1.15	0.90	1.46	0.26	
Diabetes	1.05	0.87	1.27	0.61	1.20	0.89	1.61	0.22	
Coronary artery disease	1.27	0.82	1.97	0.26	0.99	0.52	1.90	0.98	
BMI (kg/m²)									
<25	1 (reference)				1 (reference)				
25–30	1.13	0.96	1.32	0.12	0.97	0.77	1.22	0.78	
≥ 30	1.28	1.10	1.48	<0.001	0.91	0.74	1.12	0.35	
Smoker	1.73	1.51	1.97	<0.001	1.40	1.11	1.76	<0.01	
Heavy alcohol use	1.05	0.91	1.22	0.48	1.26	0.98	1.61	0.06	
Missing data	1.42	1.25	1.61	<0.001	1.65	1.36	1.99	<0.001	
Prescriptions									
Opioids	1.56	1.32	1.84	<0.001	1.31	0.86	2.00	0.19	
Benzodiazepines	1.50	1.06	2.14	0.02	1.33	0.90	1.97	0.14	
Z drugs	1.75	1.09	2.80	0.02	0.85	0.30	2.35	0.74	

Barbiturates	1.03	0.38	2.78	0.96	1.41	0.35	5.57	0.62
Other sedatives	1.28	0.96	1.70	0.08	2.50	1.64	3.83	<0.001
Stimulants	1.61	0.90	2.89	0.10	1.36	0.58	3.16	0.46
Survey year								
2005-06	1 (reference)			1 (reference)				
2007-08	1.08	0.85	1.37	0.51	0.72	0.48	1.09	0.11
2009-10	0.86	0.72	1.03	0.09	0.69	0.44	1.08	0.09
2011-12	1.07	0.86	1.35	0.53	0.77	0.48	1.24	0.27
2013-14	0.95	0.79	1.14	0.54	0.82	0.54	1.25	0.34
2015-16	0.46	0.38	0.57	<0.001	4.68	3.49	6.28	<0.001
2017-18	0.68	0.51	0.91	<0.01	3.56	2.51	5.04	<0.001