

Supplementary Material

Article Title: Actigraphy-Measured Sleep/Wake Characteristics Associated With Suicidal Ideation in Older Adults Who Have Depression and High Suicide Risk

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DISCLAIMER

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Supplementary Table 1. Associations between initial sleep/wake factors and baseline suicidal ideation severity in the overall sample and subgroups with and without a prior suicide attempt

	Overall sample (n=30)		Subgroup with a prior suicide attempt (n=21)		Subgroup without a prior suicide attempt (n=9)	
	β (standard error)	p-value	β (standard error)	p-value	β (standard error)	p-value
Insomnia Severity Index total score	-0.3 (1.5)	0.83	2.1 (1.8)	0.26	-4.7 (4.0)	0.31
Inter-daily stability ^a	-2.0 (0.9)	0.04	-1.9 (1.1)	0.09	-2.7 (2.4)	0.04
Relative amplitude ^a	-2.6 (0.9)	0.009	-2.8 (1.0)	0.02	-2.1 (2.3)	0.42
Sleep duration ^a	0.3 (1.0)	0.74	0.4 (1.2)	0.73	0.7 (2.9)	0.83
Wake after sleep onset ^a	1.2 (1.0)	0.22	2.0 (1.2)	0.10	-2.4 (2.0)	0.30

All regression coefficients were derived from separate linear regression models adjusted for age, sex, and depression severity. ^aObjective actigraphy sleep/wake measures shown in this table are from the first recording week (between the baseline visit and first weekly call)

Supplementary Table 2. Associations between sleep/wake measures with weekly depression severity measured with the PHQ-8

	β (standard error)	p-value
Inter-daily stability	-1.0 (0.5)	0.03
Relative amplitude	-1.0 (0.4)	0.009
Sleep duration	-1.2 (0.5)	0.02
Wake after sleep onset	-0.2 (0.4)	0.21

Regression coefficients were derived from separate mixed effects models adjusted for age, sex, and week in study. Sleep/wake measures reflect the week prior to the depression severity measure. The number of observations range from 146-149 due to differences in sleep/wake variable missingness.

Supplementary Table 3. Partial, age/sex adjusted, Pearson correlations between the initial sleep/wake variables

	Insomnia Severity Index total score		Inter-daily stability		Relative amplitude		Sleep duration		Wake after sleep onset	
	Pearson r	p-value	Pearson r	p-value	Pearson r	p-value	Pearson r	p-value	Pearson r	p-value
Insomnia Severity Index	1.00		-0.21	0.28	-0.40	0.03	-0.24	0.22	0.33	0.09
Inter-daily stability	-0.21	0.28	1.00		0.80	<.0001	-0.04	0.83	-0.33	0.09
Relative amplitude	-0.40	0.03	0.80	<.0001	1.00		0.24	0.23	-0.55	0.003
Sleep duration	-0.24	0.22	-0.04	0.83	0.24	0.23	1.00		-0.36	0.06
Wake after sleep onset	0.33	0.09	-0.33	0.09	-0.55	0.003	-0.36	0.06	1.00	