



Supplementary Figure 1: Flowchart for screening, inclusion, and exclusion of cases. APMs: Antiparkinsonian medications, ESS: Epworth sleepiness scale, LEDD: Levodopa equivalent daily dose, MDS-NMS: Movement Disorders Society-non-motor rating scale, MDS-UPDRS: Movement disorders society-unified Parkinson's disease rating scale, MoCA: Montreal cognitive assessment scale score, PD: Parkinson's disease, PHQ4: Patient health questionnaire-4; PSQI: Pittsburgh sleep quality index.

Supplementary Table 1: Comparison of clinical and treatment characteristics of patients with and without poor sleep quality.

Variables	Poor sleep quality		P-value	df	Test value
	No (n=22)	Yes (n=28)			
Age at onset (in years): Mean (SD)*	51.81 (10.31)	53.93 (9.69)	0.46	48	C.I=-7.82-3.59
Age at assessment (in years): Mean (SD)*	57.91 (10.19)	60.18 (9.82)	0.43	48	C.I=-7.99-3.45
Male gender: n (%)	16 (72.7)	15 (53.6)	0.16		
Comorbidities-HT and/or DM: n (%)	8 (36.4)	11 (39.3)	0.83	1	$\chi^2=0.05$
Disease duration: Median (IQR)#	60 (42-87)	48.5 (31.5-108)	0.54	-	U=277
YOPD patients: n (%)	10 (45.5)	7 (25)	0.13	1	$\chi^2=2.29$
PD subtypes: [§]					
TDPD patients: n (%)	12 (54.5)	22 (78.6)	0.08	2	$\chi^2=4.96$
PIGD patients: n (%)	10 (45.5)	5 (17.9)			
MDS-UPDRS-III score: Median (IQR)#	40 (22-44)	34 (26.3-27.8)	0.96	-	U=310.5
MDS-NMS score: Median (IQR)#	47.5 (27.8-82.4)	66.5 (41.8-108.5)	0.15	-	U=381.5
Hoehn-Yahr stage >2: n (%)**	4 (18.2)	8 (28.6)	0.51	-	-
Anxiety: n (%)**	4 (18.2)	11 (39.3)	0.13	-	-
Depression: n (%)**	3 (13.6)	13 (46.4)	0.02	-	-
EDS (ESS >10): n (%)**	2 (9.1)	2 (7.1)	1.00	-	-
Cognitive impairment (MoCA <26): [®] n (%)	5/20 (25)	5/24 (20.8)	0.74	1	$\chi^2=0.11$
Global Quality of Life Scale score: Median (IQR)#	70 (65-80)	72.5 (60-80)	0.86	-	U=316.5
APMs prescribed:					
Levodopa-carbidopa: n (%)	22 (100)	28 (100)	-	-	-
Dopamine agonist: n (%)	10 (45.5)	8 (28.6)	0.22	1	$\chi^2=1.52$
Anticholinergic: n (%)	5 (22.7)	5 (17.9)	0.67	1	$\chi^2=0.18$
MAOBI: n (%)**	3 (13.6)	5 (17.9)	1.00	-	-
Amantadine: n (%)**	1 (4.5)	4 (14.3)	0.37	-	-
COMTI: n (%)	2 (9.1)	2 (7.1)	1.00	-	-
Combination of APMs prescribed					
LD-carbidopa+COMTI: n (%)	10 (45.5)	14 (50)	0.75	1	$\chi^2=0.10$
LD-carbidopa+other APMs: n (%)	12 (54.5)	14 (50)			
LEDD (mg): Median (IQR)#	525 (400-762.5)	525 (400-900)	0.39	-	U=351.5
High pill burden: n (%)#	13 (59.1)	18 (64.3)	0.71	-	$\chi^2=0.14$
Regular follow-up: n (%)**	18 (81.8)	26 (92.9)	0.39		
Medium-low adherence: n (%)	13 (59.1)	14 (50)	0.52	1	$\chi^2=0.41$

*Normal distribution, #Non-parametric distribution, §One patient had indeterminate subtype of PD, **Fisher's Exact test, ® Six patients MoCA could not be done as they were illiterate, ##High pill burden ≥4 pills per day. APMs: Antiparkinsonian medications, C.I: Confidence interval, COMTI: Catechol-o-methyl transferase inhibitor, df: Degrees of freedom, DM: Diabetes mellitus, EDS: Excessive daytime sleepiness, ESS: Epworth sleepiness scale, HT: Hypertension, IQR: Interquartile range, LEDD: Levodopa equivalent daily dose, LD: Levodopa, MAOBI: Monoamine oxidase B inhibitor, MDS-NMS: Movement disorders society- non-motor rating scale, MDS-UPDRS: Movement disorders society-unified Parkinson's disease rating scale, MoCA: Montreal cognitive assessment scale score, PD: Parkinson's disease, PIGD: Postural instability/gait difficulty, PSQI: Pittsburgh sleep quality index, SD: Standard deviation, TDPD: Tremor-dominant Parkinson's disease, YOPD: Young-onset Parkinson's disease