

Supplementary Table1 Demographic and clinical characteristics of the patient (N=162)

Characteristics	patient, N=162
Gender	
Male	103(63.6)
Female	59(36.4)
Age	65.1±9.5
Age of onset	56.5±11.7
Duration of Parkinson	8.7±6.5
Education	
Less than high school(<12)	64(39.5)
More than college(≥ 12)	98(60.5)
Years of education	107±4.8
Marital Status	
Unmarried	16(9.9)
Married	146(90.1)
Unemployment	132(81.5)
Comorbid with other diseases	107(66.0)
Past psychiatric history	
No psychiatric history	133(82.1)
Depressive disorder	18(11.1)
Anxiety disorder	5(3.1)
Insomnia	7(4.5)
Suicide history	1(0.6)
Family psychiatric history	
No psychiatric history	155(95.7)
Depressive disorder	5(3.1)
Anxiety disorder	2(1.2)
Family suicide history	3(3.1)
Anxiolytics/Hypnotics use	48(29.6)
UPDRS scores	41.4±10.7
H&Y staging	2.3±0.4
BHS	5.9±4.5
FSS	26.5±16.6
CDRISC	30.5±9.5
BFI-10	
Extraversion	4.3±2.8
Agreeableness	6.5±1.6

Conscientiousness	8.8±1.8
Neuroticism	5.8±2.1
Openness	6.8±1.5
HAMD	7.1±6.4
HAMA	8.2±7.1
MINI	
Depressive disorders	
Major depressive disorder	19(11.7)
Depressive disorder NOS	23(14.2)
Dysthymia	3(1.9)
Adjustment disorder	4(2.5)
Anxiety disorder NOS	5(3.1)
Insomnia disorder	14(8.6)
Others	25(15.4)
No diagnosis	75(46.3)

UPDRS= Unified Parkinson's Disease Rating Scale; BHS= Beck Hopelessness Scale ; FSS= Fatigue Severity Scale; CORISC = Connor-Davidson Resilience Scale ; BFI-10= Big Five Inventory-10 ; HAMD= Hamilton Depression Rating Scale ; HAMA= Hamilton Anxiety Rating Scale; MINI= Mini International Neuropsychiatric Interview ; Anxiety disorder NOS = Anxiety disorder not otherwise specified ; Depressive disorder NOS= Depressive disorder not otherwise specified; Others= REM sleep behavior disorder、Depressive disorder not otherwise specified history 、Major depressive disorder history 、Bipolar and related disorder due to another medical condition

Supplementary Table 2 Demographic and clinical characteristics of the caregivers (N=162)

Characteristics	Inpatients group, N=12	Outpatients group, N= 150	Total, N=162	z/x ²	P
Gender				1.76	0.
Male	6(50.0)	47(31.3)	53(32.7)		
Female	6(50.0)	103(94.5)	109(67.3)		
Age	54.7±14.3	59.5±12.3	59.1±12.5	-1.12	0.29
Duration of caring	9.25±3.1	7.6±5.5	7.7±5.3	-1.75	0.08
Education				1.04	0.29

Years of education	13.1±3.7	11.5±4.2	11.7±4.2	-1.47	0.16
Marital Status				0.16	0.0
Unmarried	2(16.7)	21(14.0)	23(14.2)		
Married	10(83.3)	129(86.0)	139(85.8)		
Unemployment	7(58.3)	101(67.3)	108(66.7)	0.41	0.1
Comorbid with other diseases	4(33.3)	76(50.7)	80(49.4)	1.34	0.2
Past psychiatric history				0.01	0.9
No psychiatric history	11(91.7)	136(90.7)	147(90.7)		
Depressive disorder	0	6(4.0)	6(3.7)		
Anxiety disorder	0	3(2.0)	3(1.9)		
Insomnia	1(8.3)	7(4.7)	8(4.9)		
Suicide history	0	1(0.7)	1(0.6)	0.13	0.1
Family psychiatric history				0.76	0.0
No psychiatric history	12(100.0)	141(94.0)	153(94.4)		
Depressive disorder	0	7(4.7)	7(4.3)		
Anxiety disorder	0	2(1.3)	2(1.2)		
Family suicide history	0	6(4.0)	6(3.7)	0.50	0.4
Anxiolytics/Hypnotics use	1(8.3)	16(10.7)	17(10.5)	0.06	0.8
Depressive	1(8.3)	17(11.3)	18(11.1)	0.10	0.1
UPDRS of people with PD	41.8±22.2	37.7±12.2	37.9±13.1	-0.11	0.9
H&Y staging	2.6±0.9	2.1±0.4	2.2±0.4	-1.55	0.1
BHS	1.8(0-5)	3.5(0-15)	3.3(0-15)	-1.44	0.1
FSS	25.7±14.8	24.5±13.8	24.6±13.9	-0.16	0.3
CDRISC	30.3±8.5	30.8±8.1	30.8±8.1	-0.28	0.1
BFI-10					
Extraversion	6.3±2.1	5.7±2.4	5.8±2.3	-1.07	0.1
Agreeableness	6.5±1.3	6.6±1.6	6.6±1.6	-0.19	0.8
Conscientiousness	8.0±2.0	7.9±1.7	7.9±1.7	-0.17	0.8
Neuroticism	4.9±1.4	5.1±1.8	5.1±1.7	-0.57	0.1
Openness	6.2±1.2	6.4±1.4	6.4±1.3	-0.61	0.1
HAMD	2.8(0-16)	3.7(0-26)	3.6(0-26)	-1.04	0.1
HAMA	4.0(0-23)	4.4(0-30)	4.4(0-30)	-1.38	0.1