

Supplement Table S1. Proportion of patients with behavioral disorders in each item of DBD: before and during COVID-19 pandemic, by MCI and Dementia group

	Total Group			MCI Patients			Dementia Patients			P value
	Before	During	P value	Before	During	P value	Before	During		
01. Asks the same question over and over again	1475 (82.9)	484 (84.0)	0.559	531 (71.9)	185 (78.1)	0.073	944 (90.7)	299 (88.2)	0.222	
02. Loses, misplaces, or hides things	1263 (71.0)	416 (72.3)	0.581	423 (57.2)	143 (60.3)	0.444	840 (80.8)	273 (80.8)	1.000	
03. Shows lack of interest in daily activities	874 (49.4)	288 (50.4)	0.712	245 (33.2)	78 (33.2)	1.000	629 (61.0)	210 (62.5)	0.672	
04. Wakes up at night for no obvious reason	266 (15.2)	113 (19.9)	0.010	43 (5.9)	24 (10.2)	0.033	223 (21.0)	89 (26.7)	0.082	
05. Makes unwarranted accusations	321 (18.1)	118 (20.5)	0.214	84 (11.4)	34 (14.3)	0.267	237 (22.9)	84 (24.9)	0.502	
06. Sleeps excessively during the day	687 (38.8)	245 (42.6)	0.117	197 (26.7)	79 (33.3)	0.060	490 (47.4)	166 (49.1)	0.636	
07. Paces up and down	171 (9.7)	70 (12.2)	0.096	28 (3.8)	6 (2.5)	0.473	143 (13.8)	64 (19.0)	0.027	
08. Repeats the same action over and over again	239 (13.5)	81 (14.1)	0.751	50 (6.8)	16 (6.8)	1.000	189 (18.3)	65 (19.3)	0.739	
09. Is verbally abusive, curses	287 (16.2)	104 (18.1)	0.308	81 (11.0)	39 (16.5)	0.034	206 (19.8)	65 (19.2)	0.872	
10. Dresses inappropriately	305 (17.2)	102 (17.8)	0.778	56 (7.6)	21 (8.9)	0.606	249 (24.0)	81 (24.0)	1.000	
11. Cries or laughs inappropriately	108 (6.1)	46 (8.0)	0.123	11 (1.5)	9 (3.8)	0.055	97 (9.3)	37 (11.0)	0.430	
12. Refuses to be helped with personal care	354 (19.9)	124 (21.6)	0.435	100 (13.6)	37 (15.6)	0.492	254 (24.5)	87 (25.7)	0.698	
13. Hoards things for no obvious reason	410 (23.1)	151 (26.4)	0.127	103 (14.0)	47 (19.9)	0.035	307 (29.6)	104 (30.9)	0.720	
14. Moves arms or legs in a restless or agitated way	126 (7.1)	35 (6.1)	0.471	36 (4.9)	9 (3.8)	0.626	90 (8.7)	26 (7.7)	0.650	
15. Empties drawers or closets	134 (7.5)	48 (8.4)	0.567	14 (1.9)	6 (2.6)	0.720	120 (11.6)	42 (12.5)	0.731	
16. Wanders in the house at night	88 (5.0)	38 (6.7)	0.154	9 (1.2)	2 (0.9)	0.917	79 (7.7)	36 (10.7)	0.110	
17. Gets lost outside	89 (5.0)	43 (7.5)	0.031	6 (0.8)	5 (2.1)	0.190	83 (8.0)	38 (11.3)	0.085	
18. Refuses to eat	72 (4.1)	23 (4.0)	1.000	12 (1.6)	4 (1.7)	1.000	60 (5.8)	19 (5.7)	1.000	
19. Overeats	267 (15.0)	82 (14.30)	0.730	79 (10.7)	21 (8.9)	0.509	188 (18.2)	61 (18.2)	1.000	
20. Is incontinent of urine	229 (12.9)	77 (13.4)	0.809	40 (5.4)	17 (7.2)	0.389	189 (18.3)	60 (17.8)	0.897	
21. Wanders aimlessly outside or in the house during the day	79 (4.5)	39 (6.8)	0.033	4 (0.5)	1 (0.4)	1.000	75 (7.2)	38 (11.3)	0.026	
22. Physical attacks	44 (2.5)	22 (3.8)	0.117	8 (1.1)	7 (3.0)	0.081	36 (3.5)	15 (4.4)	0.513	

23. Screams for no reason	47 (2.6)	17 (3.0)	0.790	12 (1.6)	5 (2.1)	0.826	35 (3.4)	12 (3.6)	1.000
24. Makes inappropriate sexual advances	13 (0.7)	2 (0.3)	0.484	8 (1.1)	0 (0.0)	0.234	5 (0.5)	2 (0.6)	1.000
25. Exposes himself/herself indecently	5 (0.3)	1 (0.2)	1.000	0 (0.0)	0 (0.0)	1.000	5 (0.5)	1 (0.3)	1.000
26. Destroys property or clothing	21 (1.2)	5 (0.9)	0.699	3 (0.4)	1 (0.4)	1.000	18 (1.7)	4 (1.2)	0.653
27. Is incontinent of feces	85 (4.8)	32 (5.6)	0.519	10 (1.4)	6 (2.5)	0.338	75 (7.2)	26 (7.7)	0.872
28. Throws food	15 (0.8)	2 (0.3)	0.348	4 (0.5)	1 (0.4)	1.000	11 (1.1)	1 (0.3)	0.328

* For each item of the DBD, "positive for the behavioral disorder" was defined as an answer of "sometimes", "often", or "always," and the proportion was calculated. *P* values in **bold** indicate statistical significance. Abbreviations: DBD = Dementia Behavioral Disturbance Scale.