

Factors Influencing Adherence with Cognitive Rehabilitation in Patients with Dementia

Ji Ae Kim, MD¹, Da Yeong Kim, MD¹, Heung Soo Kim, OT², Mi Jung Park, OT², Dawoon Jeong, RP², Dae Yul Kim, MD. PhD¹ ¹Department of Rehabilitation Medicine ²Department of Rehabilitation Medicine, Asan Medical Center, Seoul, Republic of Korea



Backgrounds

✤ Dementia

decline in memory, cognition, behavior, and the capacity to daily tasks.

Cognitive Rehabilitation (CR)

- strategy to preserve independence as feasible in these patients.
- continuation of CR and adherence are important for effectiveness of CR

Table 2. Baseline characteristics of patients receiving CR according to adherence

		Adherence >80% (n=49)Adherence <80% (n=87) p-value			
	Age	63.2 ± 15.4	68.0 ± 13.5	0.085	
<u>)</u>	Sex (male/female)	31(63.2%)/18(36.7%)	49 (56.3%)/38(43.7%)	0.131	
	Compliance	93.7 ± 7.1 %	37.0 ± 29.0 %	<0.001*	
	Diagnosis			0.578	
	Alzheimer dementia	13 (26.5%)	26 (29.9%)		
	Vascular dementia	26 (53.1%)	40 (46.0%)		
	ETC	10 (20.4%)	21 (24.1%)		
	Reason for stop			0.001*	
	Improved (subjective)	11 (22.4 %)	13 (14.9%)		
	Prescription expiration	18 (36.7%)	5 (5.7%)		
	Poor cooperation	10 (20.4%)	37 (42.5%)		
	Aggravation of other		15 (17.2%)		
	physical problem	5 (10.2%)			
	Distance	1 (2.0%)	7 (8.0%)		
	Unknown	4 (8.2%)	8 (9.1%)		
	Family meeting (+/-)	22(44.9%) /27 (55.1%)	23(26.4%)/64(73.6%)	0.001*	
	Over 1year (+/-)	25 (51.0%) /24 (48.9%)	10 (11.5%) /77 (87.5%)	<0.001*	
	Social economic status			0.495	
	Better	20 (40.8%)	40 (46.0%)		
	Poor	29 (59.2%)	47 (54.0%)		
	Caregiver			0.732	
	Sprouse	19 (38.8%)	37 (42.5%)		
	1 st degree	14 (28.6%)	31 (35.6%)		
	2 nd degree	1 (2.0%)	5 (5.7%)		
	Unknown	2 (4.0%)	3 (3.4%)		
	Distance			0.423	
	Less than 1 hour	37 (75.5%)	62 (71.2%)		
	Over 1 hour	11 (22.4%)	25 (28.7%)		

Objective

To investigate the factors that determine high adherence in CR on dementia patients.

Methods

Participants

single-center, retrospective, cohort study enrolled patients who were diagnosed with dementia in the ages above 20 who visited Asan Medical center for the CR (2016.01-2023.12)

CR

1~2 /week, One hour per session Computer based CR and/or training using workbooks

***** Adherence

a percentage of the total number of treatment prescriptions completed within 3 months after the start of CR

Divide into groups based on 80%

Family meeting : proposed to the patient and their caregivers <u>after one month of therapy</u>

* Measurements

- Baseline characteristics : age, gender, diagnosis, caregivers, Distance to hospital, etc.
- Functional assessments: mini-mental state examination (MMSE), global deterioration scale (GDS), instrumental ADL (I-ADL)

Results

Table 1. Baseline characteristics of patients receiving CR

Table 3. Functional assessments of patients receiving **CR** according to adherence

	Adherence >80%	Adherence <80%	p-value
Baseline			
GDS	3.9 ± 1.1	3.8 ± 1.1	0.312
MMSE	18.9 ± 6.4	19.9 ± 7.6	0.180
IADL	25.8 ± 9.5	19.8 ± 13.5	0.035*

Characteristics				
Age, mean (range)	65.9 ± 15.0 (20–96)			
Sex (male/female)	80 (59%) / 56 (41%)			
Adherence (range)	57.6 % (0-100)			
Diagnosis				
Alzheimer dementia	39 (28%)			
Vascular dementia	65 (47%)			
ETC	32 (25%)			
Caregiver				
Sprouse	61 (44%)			
Parents / children	50 (37%)			
Relative	6 (4%)			
Unknown	19 (15%)			
Family meeting (yes/no)	44 (33%)/ 92 (67%)			
Distance (less than 1hr/more than 1hr)	98 (72%)/ 38(28%)			

About 3month f/u

IADL	22.5± 11.1	12.9± 12.3	0.002*
MMSE	20.6± 6.5	22.6± 5.7	0.206
GDS	4.1 ± 1.0	3.3± 1.2	0.152

High adherence group : prescription expiration most dominant

Iow adherence group : poor cooperation most significant

- \Rightarrow family meetings attendance $\uparrow \rightarrow$ high adherence
- ♦ baseline IADL $\uparrow \rightarrow$ high adherence

Conclusion

CR adherence in dementia was related to the reasons for stop, family meetings attendance, and baseline IADL \Rightarrow To maintain high CR adherence \rightarrow increase patient cooperation and maintain CR through encouraging family meetings.