

Supplementary material to:

Dementia Recognition and Cognitive Performance in Relation to Elderly Patients' Social Integration

Demenzerkennung und kognitive Leistung in Abhängigkeit von der sozialen Integration älterer Patienten/innen

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Characteristic	Incident dementia sample FU1–FU3	Non-dementia sample FU2
n _{patients}	58	709
n _{FP-practices}	32	63
Age [mean, SD]	83.7 (4.9)	82.4 (3.5)
MMSE [mean, SD]	22.7 (3.7)	28.0 (1.6)
Gender [%]		
male	27.6	32.9
female	72.4	67.1
Education [%]		
low	60.3	61.5
mediate/high	39.7	38.5
Partner [%]		
yes	39.7	42.7
no	60.3	57.3
SII [%]		
low	43.1	40.3
high	56.9	59.7
GEE generalized estimating equation; MMSE mini mental state examination; SII social integration index		

Table 1 Characteristics of patients in generalized estimating equation analysis samples (with complete data on dependent and independent variables)

Incident dementia cases		low SII, no partner (A)	low SII, partner (B)	high SII, no partner (C)	high SII, partner (D)	Non-parametric comparison (Kruskal-Wallis)			
						χ^2 (df = 3)	P	relevant overall effect* (d ≥ 0.50)	relevant pairwise effects* (d ≥ 0.50)
Global cognition (MMSE)	Mean score (SD) at dementia diagnosis	22.17 (3.29; n = 21)	23.77 (3.16; n = 12)	21.91 (5.17; n = 22)	22.44 (3.69; n = 16)	1.53	.678	-	-
	Mean decline (SD) preceding dementia	-3.68 (3.87; n = 21)	-1.98 (2.92; n = 12)	-4.14 (4.78; n = 22)	-2.94 (3.82; n = 16)	2.00	.586	-	-
Memory (CERAD)	Mean score (SD) at dementia diagnosis	17.59 (7.47; n = 17)	19.22 (3.87; n = 9)	16.19 (7.95; n = 16)	18.80 (6.24; n = 15)	0.82	.844	-	-
	Mean decline (SD) preceding dementia	-6.53 (8.12; n = 17)	-6.22 (3.35; n = 9)	-11.06 (10.03; n = 16)	-6.53 (4.93; n = 15)	1.78	.619	-	-
Verbal fluency (CERAD)	Mean score (SD) at dementia diagnosis	10.79 (4.21; n = 19)	9.60 (2.07; n = 10)	8.67 (5.19; n = 18)	9.87 (4.90; n = 15)	1.23	.755	-	-
	Mean decline (SD) preceding dementia	-2.21 (4.35; n = 19)	-2.40 (3.27; n = 10)	-6.00 (6.60; n = 18)	-3.47 (5.29; n = 15)	2.87	.429	-	AC 0.51; BC 0.52
Orientation (SIDAM)	Mean score (SD) at dementia diagnosis	6.47 (2.37; n = 19)	7.00 (1.76; n = 10)	5.61 (2.33; n = 18)	6.94 (2.21; n = 16)	3.69	.297	-	BC 0.58; CD 0.60
	Mean decline (SD) preceding dementia	-2.68 (2.08; n = 19)	-2.10 (1.73; n = 10)	-3.72 (2.63; n = 18)	-2.44 (2.45; n = 16)	3.20	.361	-	BC 0.58; CD 0.50
Verbal intellectual abilities (SIDAM)	Mean score (SD) at dementia diagnosis	3.67 (0.82; n = 15)	3.78 (0.97; n = 9)	2.53 (1.46; n = 17)	3.69 (1.14; n = 16)	8.25	.041	0.61	AC 0.87; BC 0.91; CD 0.80
	Mean decline (SD) preceding dementia	-0.71; (1.20; n = 14)	-1.00 (1.07; n = 8)	-1.59 (1.54; n = 17)	-0.67 (1.11; n = 15)	4.16	.245	-	AC 0.59; CD 0.65
Depressive-ness	Mean score (SD) at dementia diagnosis	4.11 (3.14; n = 18)	4.20 (2.20; n = 10)	3.92 (3.30; n = 13)	3.27 (1.71; n = 15)	1.34	.714	-	BD 0.60
	Mean change (SD) preceding dementia	-0.47 (2.37; n = 17)	-0.50 (3.14; n = 10)	1.23 (3.81; n = 13)	0.53 (3.18; n = 15)	2.28	.527	-	AC 0.51
Subjective memory impairment	Mean score (SD) at dementia diagnosis	3.27 (2.46; n = 15)	3.70 (1.95; n = 10)	3.88 (2.83; n = 17)	4.50 (2.76; n = 16)	2.09	.553	-	-
	Mean increase (SD) preceding dementia	0.71 (3.45; n = 14)	1.11 (2.57; n = 9)	1.71 (2.62; n = 17)	1.27 (2.15; n = 15)	1.09	.780	-	-
IADL	Mean score (SD) at dementia diagnosis	3.89 (2.42; n = 19)	3.80 (1.99; n = 10)	3.17 (2.62; n = 18)	3.00 (2.10; n = 16)	1.90	.594	-	-
	Mean decline (SD) preceding dementia	-3.21 (2.04; n = 19)	-3.10 (2.38; n = 10)	-4.22 (2.44; n = 18)	-2.63 (1.31; n = 16)	4.26	.235	-	CD 0.74

*overall effect size = Cohen's d based on Kruskal-Wallis H; pairwise effect size = Cohen's d based on Mann-Whitney U
 SII social integration index (excl. partner status); MMSE mini mental state examination; CERAD test battery of the Consortium to Establish a Registry for Alzheimer's Disease; SIDAM Structured Interview for the Diagnosis of Dementia of Alzheimer type; IADL instrumental activities of daily living

eTable 2 Cognitive profile by social integration/partner status in patients with incident dementia (detailed results of bivariate group comparisons)

Non-dementia cases	low SII, no partner (A)	low SII, partner (B)	high SII, no partner (C)	high SII, partner (D)	Non-parametric comparison (Kruskal-Wallis)			
					χ^2 (df = 3)	p	relevant overall effect* (d \geq 0.50)	relevant pairwise effects* (d \geq 0.50)
Global cognition (MMSE): mean score (SD)	27.59 (1.57; n = 152)	28.15 (1.44; n = 143)	28.02 (1.63; n = 271)	28.11 (1.71; n = 176)	14.88	.002	-	-
Memory (CERAD): mean score (SD)	35.31 (8.13; n = 150)	35.30 (7.33; n = 142)	36.57 (7.29; n = 272)	36.37 (7.50; n = 175)	3.70	.296	-	-
Verbal fluency (CERAD): mean score (SD)	18.69 (5.52; n = 152)	19.61 (5.71; n = 143)	20.17 (6.15; n = 272)	21.45 (6.91; n = 176)	16.23	.001	-	-
Orientation (SIDAM): mean score (SD)	9.76 (0.53; n = 152)	9.85 (0.38; n = 143)	9.76 (0.57; n = 272)	9.78 (0.52; n = 176)	2.33	.507	-	-
Verbal intellectual abilities (SIDAM): mean score (SD)	4.52 (0.72; n = 147)	4.78 (0.55; n = 140)	4.57 (0.73; n = 270)	4.68 (0.68; n = 173)	17.22	.001	-	-
Depressiveness: mean score (SD)	3.17 (2.38; n = 151)	3.20 (2.67; n = 143)	2.39 (2.16; n = 272)	1.71 (1.92; n = 176)	51.83	.000	0.53	AD 0.71; BD 0.67
Subjective memory impairment: mean score (SD)	1.59 (1.81; n = 138)	2.12 (1.97; n = 130)	1.72 (2.08; n = 247)	1.90 (1.80; n = 166)	9.75	.021	-	-
IADL: mean score (SD)	7.56 (1.03; n = 152)	6.34 (1.52; n = 143)	7.65 (0.93; n = 272)	6.08 (1.57; n = 176)	175.59	.000	1.10	AB 0.77; AD 0.90; BC 0.80; CD 0.95

*overall effect size = Cohen's d based on Kruskal-Wallis H; pairwise effect size = Cohen's d based on Mann-Whitney U
 SII social integration index (excl. partner status); MMSE mini mental state examination; CERAD test battery of the Consortium to Establish a Registry for Alzheimer's Disease; SIDAM Structured Interview for the Diagnosis of Dementia of Alzheimer type; IADL instrumental activities of daily living

eTable 3 Cognitive profile by social integration/partner status in patients without dementia (detailed results of bivariate group comparisons)