

Burden, anxiety and depressive symptoms in partners – course and predictors during the first two years after stroke

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Background

It is not clear how burden, anxiety and depressive symptoms develop in partners from the moment of stroke. Literature shows contradictory results; and although interrelated, burden, anxiety and depressive symptoms were not yet studied together.

Methods

- Restore4Stroke Cohort study, 215 couples
- CSI (burden), HADS (anxiety, depression), UPCC (pro-active coping), GSES (self-efficacy)
- Mixed model analysis

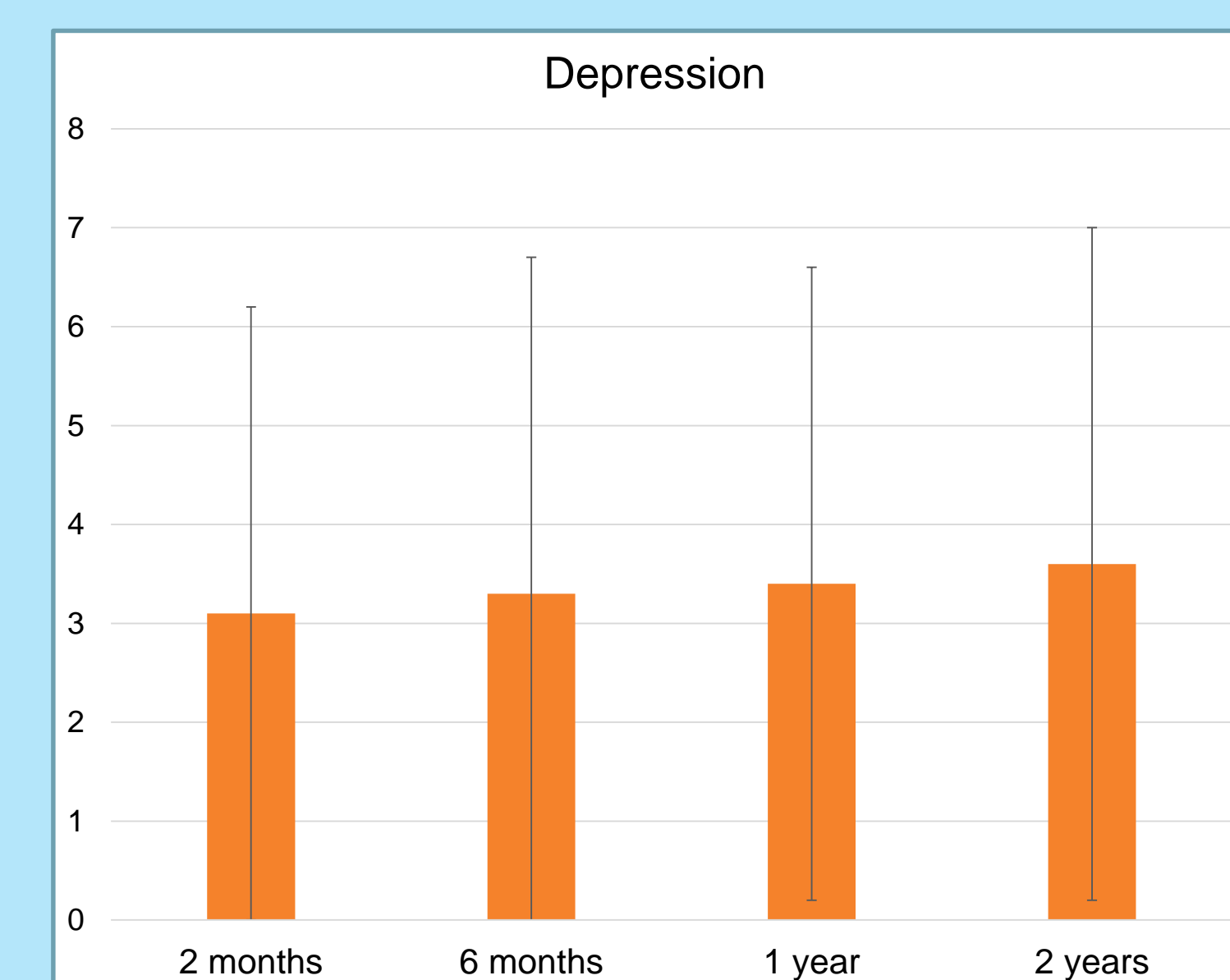
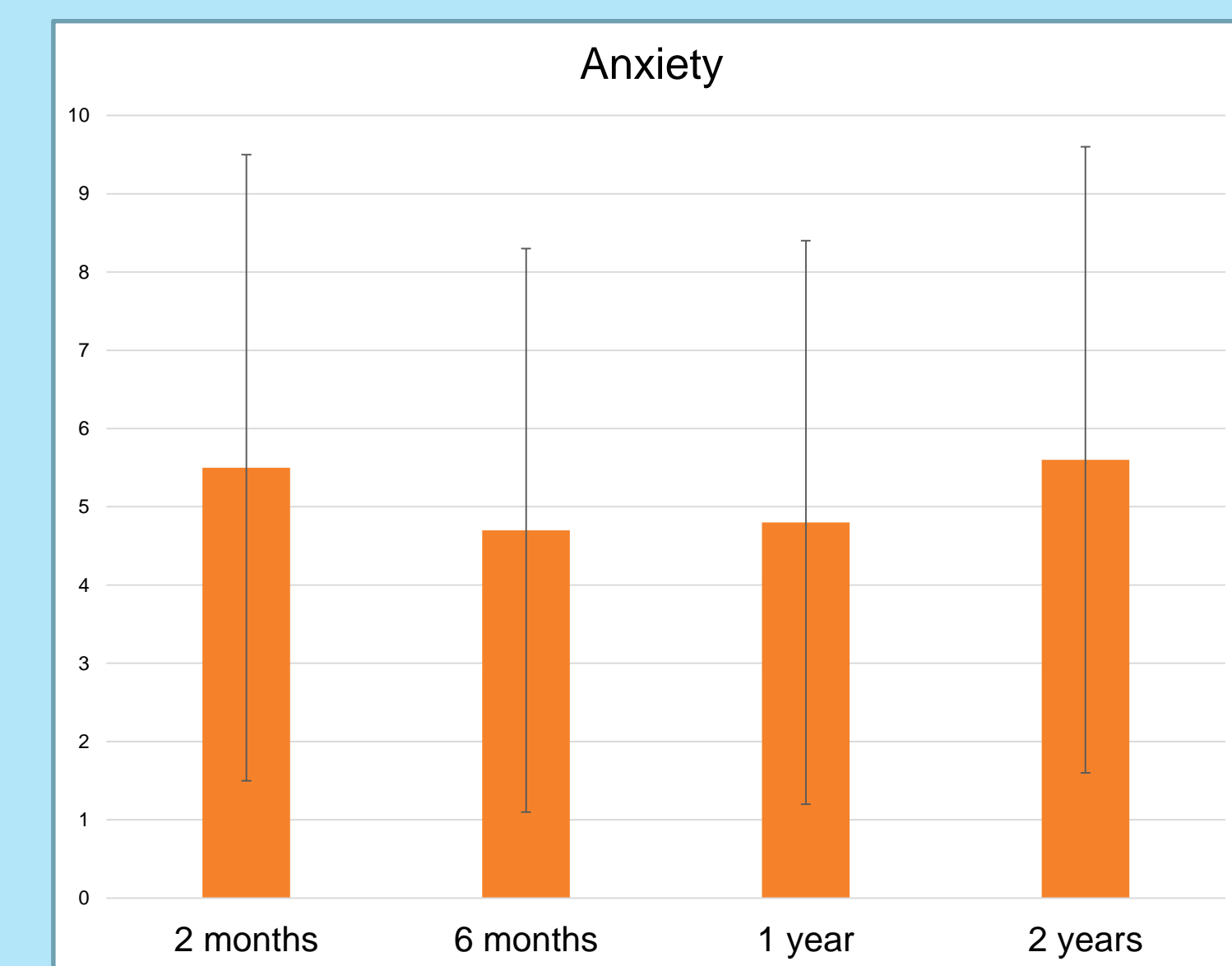
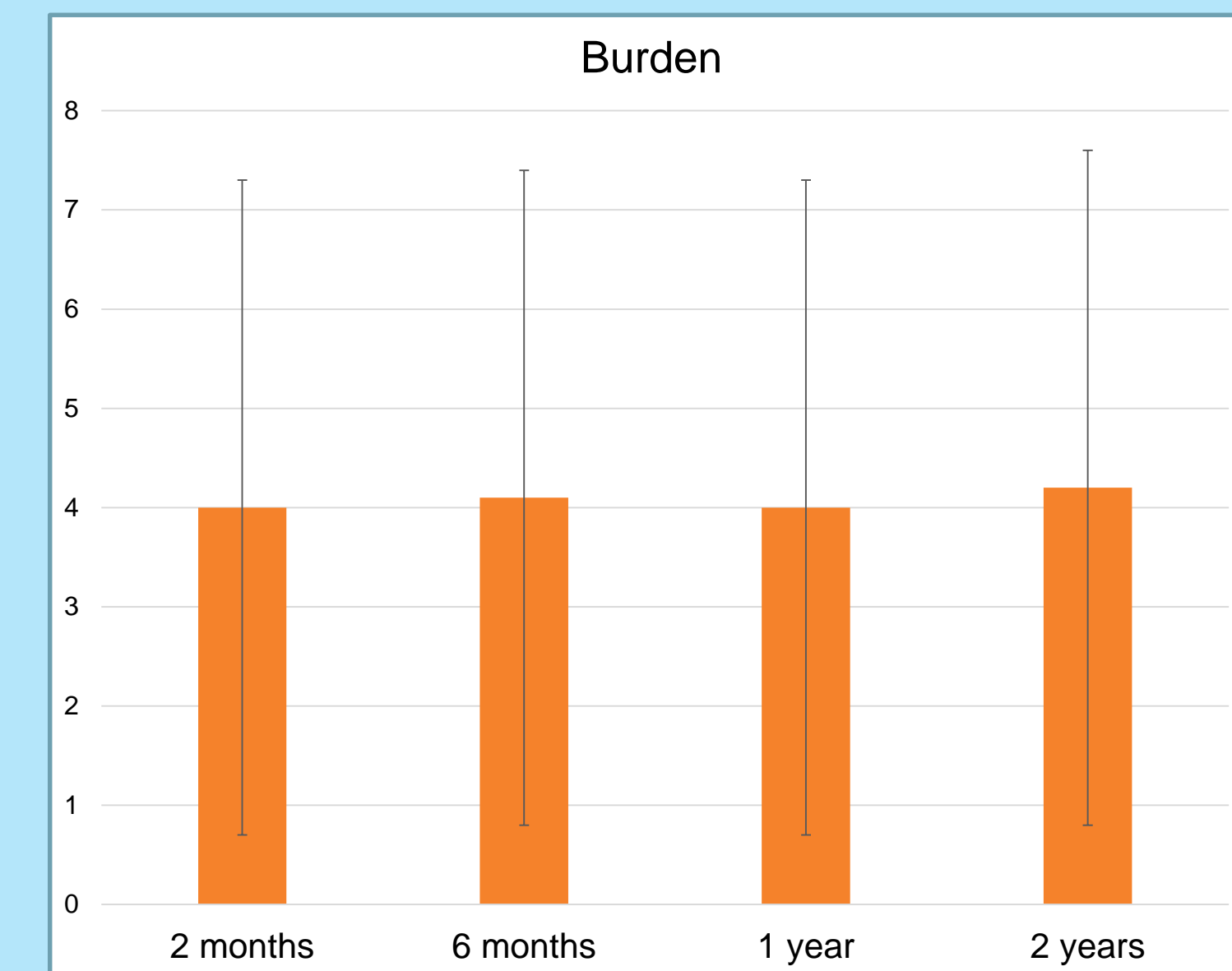
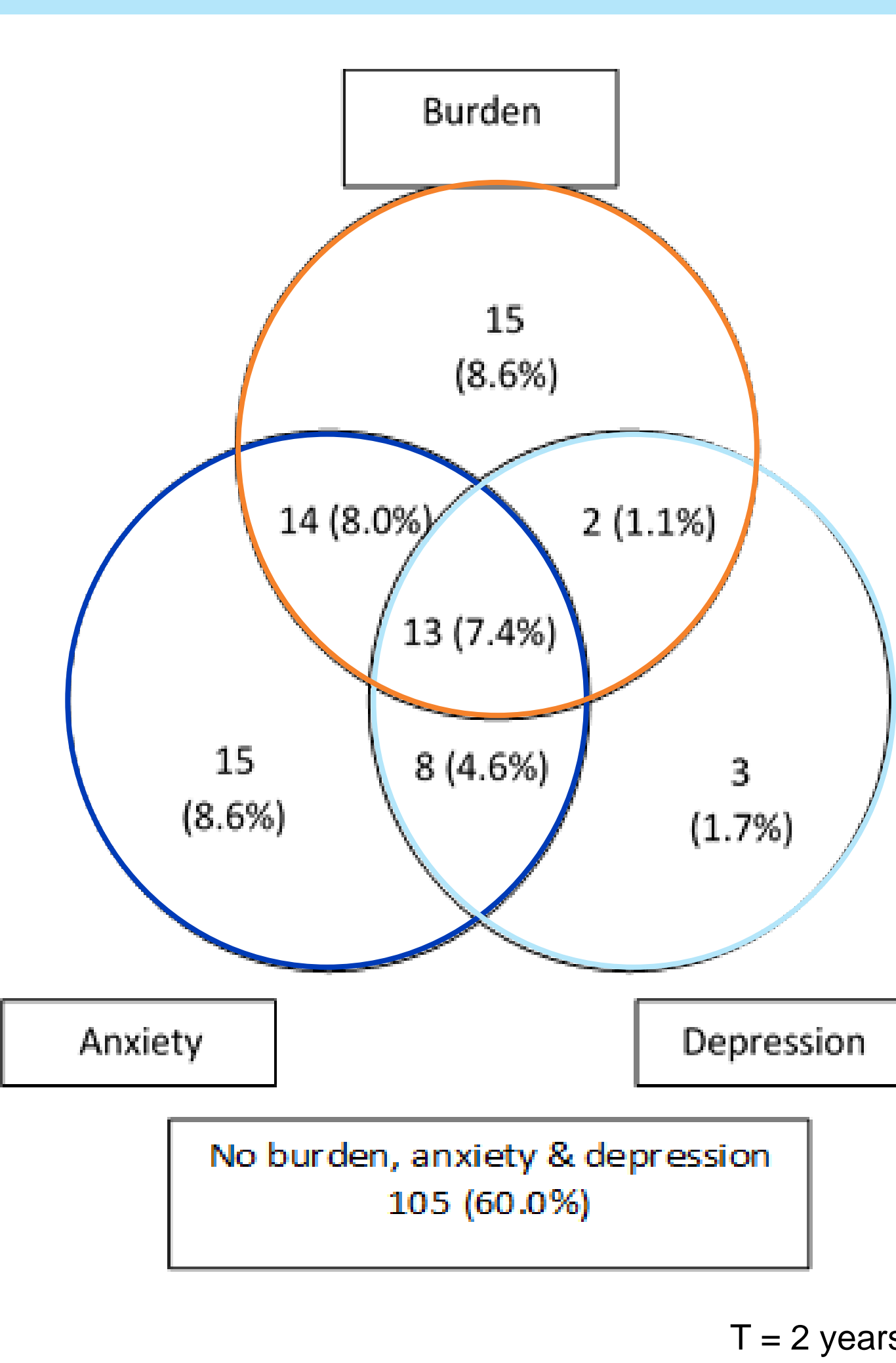
Aim

To comprehensively study the courses and predictors of burden, anxiety and depressive symptoms in partners of patients with stroke during the first two years after stroke.

Results

Patients: 64.3 yrs, 78.6% male, 94.9 % ischemic stroke, mean NIHSS 2.6

Partners: 62.6 yrs, 21.9% male



Predictors	Burden		Anxiety		Depressive symptoms	
	Estimate (95% CI)	p-value	Estimate (95% CI)	p-value	Estimate (95% CI)	p-value
Intercept	4.35 (-0.39; 9.10)	0.072	5.74 (0.61; 10.87)	0.028	2.83 (-1.08; 6.74)	0.156
Time (months)	0.01 (-0.01; 0.04)	0.246	-0.23 (-0.43; -0.03)	0.023	0.01 (-0.01; 0.02)	0.341
Quadratic effect of time	-	-	0.01 (0.00; 0.01)	<0.001	-	-
Cubic effect of time	-	-	-	-	-	-
Partner characteristics						
Age in years	-0.03 (-0.06; 0.00)	0.049	-0.03 (-0.06; 0.01)	0.155	0.04 (0.01; 0.06)	0.006
Age in years*time	-	-	0.00 (0.00; 0.00)	0.308	-	-
Male sex	-0.39 (-1.12; 0.35)	0.303	-0.25 (-0.99; 0.50)	0.512	0.21 (-0.41; 0.84)	0.505
Male sex*time	-	-	-	-	-	-
Higher education	0.86 (0.17; 1.55)	0.014	0.08 (-0.62; 0.78)	0.819	-0.10 (-0.68; 0.49)	0.745
Higher education*time	-	-	-	-	-	-
Burden (CSI)	-	-	0.28 (0.19; 0.36)	<0.001	0.16 (0.09; 0.24)	<0.001
Burden (CSI)*time	-	-	-	-	-	-
Anxiety (HADS-A)	0.22 (0.15; 0.29)	<0.001	-	-	0.42 (0.36; 0.48)	<0.001
Anxiety (HADS-A)*time	-	-	-	-	-	-
Depressive symptoms (HADS-D)	0.18 (0.10; 0.27)	<0.001	0.56 (0.48; 0.64)	<0.001	-	-
Depressive symptoms (HADS-D)*time	-	-	-	-	-	-
Proactive coping (UPCC)	0.01 (-0.69; 0.72)	0.967	-0.04 (-0.86; 0.79)	0.930	-1.27 (-1.86; -0.68)	<0.001
Proactive coping (UPCC)*time	-	-	0.01 (-0.02; 0.05)	0.488	-	-
Self-efficacy (GSES)	0.07 (-0.01; 0.16)	0.096	-0.12 (-0.20; -0.03)	0.006	0.00 (-0.07; 0.07)	0.967
Self-efficacy (GSES)*time	-	-	-	-	-	-
Patient characteristics						
Stroke severity (NIHSS)	0.15 (0.02; 0.29)	0.026	-	-	-	-
Stroke severity (NIHSS)*time	-0.01 (-0.01; 0.00)	0.108	-	-	-	-
ADL independence (BI)	-0.07 (-0.15; 0.02)	0.127	0.02 (-0.06; 0.10)	0.557	0.02 (-0.05; 0.08)	0.642
ADL independence (BI)*time	-	-	-	-	-	-
Cognitive functioning (MoCA)	-0.10 (-0.19; -0.01)	0.027	0.08 (-0.01; 0.17)	0.067	-0.05 (-0.13; 0.02)	0.154
Cognitive functioning (MoCA)*time	-	-	-	-	-	-
Anxiety (HADS-A)	0.09 (0.02; 0.16)	0.013	0.06 (-0.02; 0.13)	0.148	-0.03 (-0.09; 0.04)	0.446
Anxiety (HADS-A)*time	-	-	-	-	-	-
Depressive symptoms (HADS-D)	0.16 (0.10; 0.23)	<0.001	0.05 (-0.05; 0.15)	0.346	0.08 (0.01; 0.15)	0.019
Depressive symptoms (HADS-D)*time	-	-	-0.01 (-0.01; 0.00)	0.064	-	-

CSI = Caregiver Strain Index; HADS-A = Hospital Anxiety and Depression Scale—Anxiety subscale; HADS-D = Hospital Anxiety and Depression Scale—Depression subscale; UPCC = Utrecht Proactive Coping Competence Scale; GSES = General Self-Efficacy Scale; NIHSS = National Institutes of Health Stroke Scale; ADL = activities of daily living; BI = Barthel Index; MoCA = Montreal Cognitive Assessment

Take home messages

- The burden, anxiety and depressive symptoms experienced by partners of patients with stroke become chronic.
- Special attention should be given to anxiety, because although it decreases first, it increases again later on.
- Health care professionals should monitor both patients and partners and pay particular attention to the partners of patients with severe stroke, low cognitive functioning and depressive symptoms.
- Partners should be screened early after stroke for burden, anxiety and depressive symptoms, since each of these is a risk factor for developing the other two negative outcomes. Other risks factors are higher education, low pro-active coping and low self-efficacy. This will enable identification of partners at risk.

