

SUPPLEMENTARY MATERIAL

Effect of patient-reported outcomes as a dialogue-based tool in cancer consultations on patient self-management and health-related quality of life: a clinical, controlled trial

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Supplementary material 4

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Supplementary material 1. Comparison between patients who declined and who participated in the study.

		Patients declining participation		Patients participating		P value
		N	%	N	%	
		53		279		
Age	Median (range)	68 (33-87)		66 (30-89)		0.17
	30-39	1	2%	13	5%	0.49
	40-49	5	9%	27	10%	
	50-59	7	13%	48	17%	
	60-69	16	30%	87	31%	
	70-79	16	30%	85	30%	
	80-89	8	15%	19	7%	
	Missing value	0	0%	0	0%	
Sex	Female	18	34%	126	45%	0.17
	Male	35	66%	153	55%	
	Missing value	0	0%	0	0%	
Treatment	Immunotherapy	43	81%	200	72%	0.30
	Targeted therapy	10	19%	50	18%	
	Clinical trial participation	0	0%	5	2%	
	Best supportive care	0	0%	2	1%	
	Do not know	0	0%	20	7%	
	Not replied	0	0%	2	1%	
	Missing value	0	0%	0	0%	

Supplementary material 2. Mean scores per group per assessment and results of multivariate linear mixed-model analyses on primary and secondary outcomes.

Statistically significant values (p-values<0.05) are marked with *.

Scale	Group	Baseline, N	Baseline, mean (95% CI)	3 months, N	3 months, mean (95% CI)	6 months, N	6 months, mean (95% CI)	12 months, N	12 months, mean (95% CI)	12 months, difference to baseline (95% CI)	12 months, difference between differences to baseline (95% CI)	12 months, p value for difference between differences to baseline
Patient activation												
Total score, patient activation measure												
PAM	Intervention	93	62.2 (59.1, 65.2)	82	65.2 (62.0, 68.5)	73	66.4 (63.0, 69.8)	63	68.5 (64.9, 72.0)	6.3 (2.5, 10.1)	2.4 (-2.8, 7.5)	0.37
	Control	97	59.2 (56.2, 62.2)	90	61.6 (58.5, 64.7)	81	63.9 (60.7, 67.1)	80	63.1 (59.8, 66.3)	3.9 (0.4, 7.4)		
Health Related Quality of Life												
Summary score, Functional Assessment of Cancer Therapy – General												
FACT-G	Intervention	136	73.4 (71.0, 75.8)	110	74.2 (71.7, 76.8)	98	77.0 (74.4, 79.6)	86	76.5 (73.8, 79.2)	3.1 (1.0, 5.2)	4.4 (1.4, 7.5)	0.0040*
	Control	137	74.7 (72.3, 77.1)	118	73.9 (71.4, 76.3)	105	73.3 (70.7, 75.8)	91	73.2 (70.5, 75.8)	-1.5 (-3.6, 0.6)		
Summary score, Functional Assessment of Cancer Therapy – Melanoma												
FACT-M	Intervention	136	76.6 (74.4, 78.9)	110	77.7 (75.4, 80.0)	98	79.8 (77.4, 82.2)	86	79.0 (76.5, 81.4)	2.3 (0.4, 4.2)	3.7 (0.9, 6.4)	0.0082*
	Control	137	77.0 (74.8, 79.2)	118	76.2 (74.0, 78.5)	105	75.9 (73.5, 78.3)	90	75.5 (73.0, 77.9)	-1.5 (-3.4, 0.4)		
Summary score, Functional Assessment of Cancer Therapy – Physical Well-Being												
FACT-PWB	Intervention	136	79.8 (76.6, 82.9)	110	78.8 (75.4, 82.2)	98	81.3 (77.8, 84.8)	86	79.3 (75.7, 82.9)	-0.5 (-3.8, 2.8)	1.7 (-3.0, 6.4)	0.48
	Control	138	78.9 (75.8, 82.0)	118	77.8 (74.5, 81.1)	105	77.9 (74.4, 81.3)	91	76.4 (72.8, 79.9)	-2.5 (-5.8, 0.7)		
Summary score, Functional Assessment of Cancer Therapy – Social Well-Being												
FACT-SWB	Intervention	136	78.7 (76.0, 81.3)	110	77.0 (74.2, 79.8)	98	79.6 (76.7, 82.5)	86	79.9 (76.9, 82.9)	1.2 (-1.4, 3.8)	4.7 (1.0, 8.4)	0.012*
	Control	138	77.0 (74.4, 79.6)	118	74.3 (71.5, 77.0)	105	73.6 (70.7, 76.4)	91	73.6 (70.6, 76.5)	-3.5 (-6.0, -0.9)		
Summary score, Functional Assessment of Cancer Therapy – Emotional Well-Being												
FACT-EWB	Intervention	136	69.9 (67.0, 72.7)	110	76.1 (73.0, 79.1)	98	78.2 (75.0, 81.3)	86	78.2 (74.9, 81.5)	8.3 (5.5, 11.2)	7.2 (3.1, 11.3)	<0.001*
	Control	137	75.0 (72.1, 77.8)	118	76.2 (73.2, 79.2)	105	76.1 (73.0, 79.2)	91	75.9 (72.6, 79.1)	0.9 (-1.9, 3.8)		
Summary score, Functional Assessment of Cancer Therapy – Functional Well-Being												
FACT-FWB	Intervention	136	64.8 (61.2, 68.5)	110	65.7 (61.8, 69.5)	98	69.4 (65.4, 73.3)	86	69.5 (65.4, 73.6)	4.6 (1.2, 8.0)	4.4 (-0.4, 9.2)	0.074
	Control	138	67.6 (64.0, 71.2)	118	67.9 (64.1, 71.7)	105	66.4 (62.5, 70.3)	91	67.7 (63.7, 71.7)	0.1 (-3.2, 3.4)		
Self-efficacy												
Total score, Cancer Behavior Inventory												
CBI-B	Intervention	136	75.5 (72.7, 78.4)	109	78.2 (75.2, 81.3)	96	78.7 (75.6, 81.9)	85	77.2 (74.0, 80.5)	1.7 (-1.1, 4.6)	2.1 (-1.9, 6.1)	0.30
	Control	138	75.3 (72.5, 78.1)	118	76.2 (73.3, 79.2)	105	74.0 (70.9, 77.0)	89	75.0 (71.8, 78.2)	-0.3 (-3.1, 2.5)		
Patient-physician interaction												
Total score, Perceived Efficacy in Patient-Physician Interaction												
PEPPI	Intervention	135	80.9 (77.8, 84.0)	110	81.0 (77.7, 84.3)	96	81.9 (78.5, 85.4)	85	81.4 (77.8, 84.9)	0.5 (-2.8, 3.8)	-2.4 (-7.0, 2.2)	0.31
	Control	138	75.4 (72.3, 78.4)	118	79.0 (75.8, 82.3)	105	79.1 (75.8, 82.5)	89	78.0 (74.5, 81.6)	2.6 (-0.6, 5.9)		

Supplementary material 3. Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
PAM	Age: <65 years	Intervention	41	5.9 (0.6, 11.2)	3.7 (-3.5, 10.9)	0.60
		Control	40	2.2 (-2.7, 7.1)		
	Age: ≥65 years	Intervention	45	6.4 (1.2, 11.6)	1.0 (-6.0, 8.0)	
		Control	54	5.4 (0.7, 10.1)		
PAM	Sex: Female	Intervention	32	7.5 (1.0, 13.9)	6.3 (-1.6, 14.3)	0.16
		Control	56	1.2 (-3.5, 5.8)		
	Sex: Male	Intervention	54	5.5 (0.9, 10.0)	-1.3 (-8.2, 5.6)	
		Control	38	6.8 (1.6, 11.9)		
PAM	Education level: Low (<11 years)	Intervention	8	14.6 (2.5, 26.8)	3.6 (-11.6, 18.9)	0.59
		Control	14	11.0 (1.8, 20.2)		
	Education level: Medium (11-14 years)	Intervention	46	5.7 (0.4, 11.0)	-0.5 (-8.1, 7.1)	
		Control	36	6.2 (0.8, 11.7)		
	Education level: High (>14 years)	Intervention	32	4.8 (-0.5, 10.2)	4.9 (-2.2, 11.9)	
		Control	43	-0.0 (-4.7, 4.7)		
PAM	Unemployed	Intervention	46	7.1 (1.9, 12.3)	2.6 (-4.3, 9.4)	0.95
		Control	59	4.5 (0.0, 9.0)		
	Employed	Intervention	40	5.3 (-0.1, 10.6)	2.3 (-5.3, 9.8)	
		Control	35	3.0 (-2.3, 8.3)		
PAM	Cohabitation: Single	Intervention	16	6.9 (-2.0, 15.8)	-1.6 (-12.8, 9.6)	0.40
		Control	23	8.5 (1.7, 15.3)		
	Cohabitation: Partner	Intervention	70	6.0 (1.9, 10.1)	3.7 (-1.9, 9.4)	
		Control	71	2.2 (-1.7, 6.2)		
PAM	Comorbidity: None / one	Intervention	66	6.5 (2.3, 10.7)	2.4 (-3.2, 8.0)	0.94
		Control	78	4.1 (0.4, 7.8)		
	Comorbidity: Multiple	Intervention	20	5.1 (-3.0, 13.2)	3.0 (-9.4, 15.3)	
		Control	15	2.1 (-7.2, 11.4)		
PAM	Physical well-being: 0-19	Intervention	17	-1.2 (-10.6, 8.2)	-3.1 (-14.8, 8.7)	0.41
		Control	26	1.9 (-5.1, 8.8)		
	Physical well-being: 20-27	Intervention	58	8.5 (3.8, 13.1)	2.3 (-4.1, 8.7)	
		Control	57	6.1 (1.7, 10.5)		
	Physical well-being: 28	Intervention	11	6.4 (-3.2, 16.0)	9.6 (-4.7, 23.9)	
		Control	11	-3.2 (-13.7, 7.4)		

Supplementary material 3 (continued). Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
FACT-G Total	Age: <65 years	Intervention	41	4.8 (1.7, 7.9)	6.4 (2.0, 10.7)	0.26
		Control	40	-1.6 (-4.7, 1.5)		
	Age: ≥65 years	Intervention	45	1.4 (-1.5, 4.3)	3.0 (-0.9, 7.0)	
		Control	54	-1.7 (-4.4, 1.0)		
FACT-G Total	Sex: Female	Intervention	32	7.0 (3.5, 10.4)	9.9 (5.5, 14.2)	0.0020
		Control	56	-2.9 (-5.5, -0.3)		
	Sex: Male	Intervention	54	0.7 (-2.0, 3.3)	0.5 (-3.6, 4.6)	
		Control	38	0.2 (-3.0, 3.3)		
FACT-G Total	Education level: Low (<11 years)	Intervention	8	6.6 (-0.1, 13.3)	5.9 (-2.6, 14.4)	0.79
		Control	14	0.7 (-4.6, 5.9)		
	Education level: Medium (11-14 years)	Intervention	46	1.3 (-1.6, 4.2)	3.8 (-0.5, 8.2)	
		Control	36	-2.5 (-5.8, 0.7)		
	Education level: High (>14 years)	Intervention	32	4.5 (1.0, 7.9)	5.9 (1.3, 10.5)	
		Control	43	-1.4 (-4.4, 1.6)		
FACT-G Total	Unemployed	Intervention	46	1.9 (-1.0, 4.8)	3.8 (-0.1, 7.7)	0.58
		Control	59	-1.9 (-4.5, 0.7)		
	Employed	Intervention	40	4.2 (1.1, 7.3)	5.5 (0.9, 10.0)	
		Control	35	-1.2 (-4.5, 2.0)		
FACT-G Total	Cohabitation: Single	Intervention	16	6.7 (1.9, 11.5)	7.3 (1.0, 13.7)	0.38
		Control	23	-0.6 (-4.7, 3.4)		
	Cohabitation: Partner	Intervention	70	2.1 (-0.2, 4.5)	4.1 (0.8, 7.5)	
		Control	71	-2.0 (-4.4, 0.3)		
FACT-G Total	Comorbidity: None / one	Intervention	66	3.9 (1.5, 6.2)	6.1 (2.8, 9.3)	0.11
		Control	78	-2.2 (-4.4, 0.0)		
	Comorbidity: Multiple	Intervention	20	0.4 (-4.1, 4.8)	0.0 (-6.7, 6.7)	
		Control	15	0.3 (-4.7, 5.4)		
FACT-G Total	Physical well-being: 0-19	Intervention	17	-2.3 (-6.3, 1.7)	0.1 (-5.1, 5.3)	0.18
		Control	26	-2.4 (-5.7, 0.9)		
	Physical well-being: 20-27	Intervention	58	5.5 (3.4, 7.6)	5.4 (2.5, 8.4)	
		Control	57	0.1 (-2.0, 2.1)		
	Physical well-being: 28	Intervention	11	5.0 (0.3, 9.8)	6.6 (-0.6, 13.8)	
		Control	11	-1.6 (-7.0, 3.9)		

Supplementary material 3 (continued). Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
FACT-M Total	Age: <65 years	Intervention	41	3.6 (0.8, 6.3)	5.3 (1.5, 9.2)	0.28
		Control	40	-1.8 (-4.5, 1.0)		
	Age: ≥65 years	Intervention	45	1.0 (-1.6, 3.6)	2.4 (-1.1, 6.0)	
		Control	54	-1.5 (-3.9, 1.0)		
FACT-M Total	Sex: Female	Intervention	32	5.9 (2.8, 8.9)	8.3 (4.4, 12.2)	0.0041
		Control	56	-2.5 (-4.8, -0.1)		
	Sex: Male	Intervention	54	0.1 (-2.3, 2.4)	0.5 (-3.2, 4.1)	
		Control	38	-0.4 (-3.2, 2.4)		
FACT-M Total	Education level: Low (<11 years)	Intervention	8	4.9 (-1.0, 10.9)	4.5 (-3.3, 12.2)	0.90
		Control	14	0.5 (-4.4, 5.4)		
	Education level: Medium (11-14 years)	Intervention	46	0.8 (-1.8, 3.4)	3.5 (-0.4, 7.4)	
		Control	36	-2.7 (-5.6, 0.3)		
	Education level: High (>14 years)	Intervention	32	3.5 (0.4, 6.6)	4.8 (0.7, 8.9)	
		Control	43	-1.3 (-4.0, 1.4)		
FACT-M Total	Unemployed	Intervention	46	1.8 (-0.8, 4.4)	3.4 (-0.0, 6.9)	0.79
		Control	59	-1.6 (-4.0, 0.7)		
	Employed	Intervention	40	2.7 (-0.1, 5.5)	4.2 (0.1, 8.2)	
		Control	35	-1.5 (-4.4, 1.5)		
FACT-M Total	Cohabitation: Single	Intervention	16	4.7 (0.4, 9.1)	5.3 (-0.4, 10.9)	0.60
		Control	23	-0.5 (-4.2, 3.1)		
	Cohabitation: Partner	Intervention	70	1.6 (-0.5, 3.7)	3.6 (0.6, 6.6)	
		Control	71	-2.0 (-4.1, 0.1)		
FACT-M Total	Comorbidity: None / one	Intervention	66	2.6 (0.4, 4.7)	4.7 (1.8, 7.7)	0.24
		Control	78	-2.1 (-4.2, -0.1)		
	Comorbidity: Multiple	Intervention	20	1.2 (-2.8, 5.1)	0.7 (-5.3, 6.8)	
		Control	15	0.4 (-4.1, 5.0)		
FACT-M Total	Physical well-being: 0-19	Intervention	17	-0.9 (-4.4, 2.6)	1.3 (-3.3, 5.8)	0.46
		Control	26	-2.2 (-5.1, 0.7)		
	Physical well-being: 20-27	Intervention	58	4.3 (2.4, 6.1)	4.5 (1.9, 7.1)	
		Control	57	-0.2 (-2.0, 1.6)		
	Physical well-being: 28	Intervention	11	3.2 (-0.9, 7.4)	5.0 (-1.3, 11.3)	
		Control	11	-1.8 (-6.5, 3.0)		

Supplementary material 3 (continued). Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
FACT-M TOI	Age: <65 years	Intervention	41	3.0 (-0.2, 6.3)	5.1 (0.6, 9.7)	0.17
		Control	40	-2.1 (-5.4, 1.1)		
	Age: ≥65 years	Intervention	45	-0.2 (-3.2, 2.9)	0.8 (-3.4, 5.0)	
		Control	54	-1.0 (-3.9, 1.9)		
FACT-M TOI	Sex: Female	Intervention	32	5.6 (1.9, 9.2)	7.6 (3.0, 12.2)	0.012
		Control	56	-2.1 (-4.9, 0.7)		
	Sex: Male	Intervention	54	-1.1 (-3.9, 1.6)	-0.4 (-4.7, 3.9)	
		Control	38	-0.7 (-4.0, 2.6)		
FACT-M TOI	Education level: Low (<11 years)	Intervention	8	4.3 (-2.8, 11.3)	2.5 (-6.5, 11.5)	0.99
		Control	14	1.8 (-3.9, 7.4)		
	Education level: Medium (11-14 years)	Intervention	46	0.2 (-2.8, 3.3)	3.2 (-1.4, 7.8)	
		Control	36	-2.9 (-6.4, 0.5)		
	Education level: High (>14 years)	Intervention	32	2.0 (-1.6, 5.7)	3.3 (-1.5, 8.2)	
		Control	43	-1.3 (-4.5, 1.9)		
FACT-M TOI	Unemployed	Intervention	46	1.3 (-1.7, 4.3)	2.6 (-1.5, 6.7)	0.85
		Control	59	-1.3 (-4.0, 1.5)		
	Employed	Intervention	40	1.4 (-1.9, 4.6)	3.2 (-1.6, 7.9)	
		Control	35	-1.8 (-5.3, 1.6)		
FACT-M TOI	Cohabitation: Single	Intervention	16	3.2 (-1.9, 8.3)	3.3 (-3.3, 10.0)	0.90
		Control	23	-0.2 (-4.5, 4.2)		
	Cohabitation: Partner	Intervention	70	0.9 (-1.6, 3.4)	2.8 (-0.7, 6.3)	
		Control	71	-2.0 (-4.4, 0.5)		
FACT-M TOI	Comorbidity: None / one	Intervention	66	1.5 (-1.0, 4.1)	3.6 (0.2, 7.1)	0.41
		Control	78	-2.1 (-4.5, 0.3)		
	Comorbidity: Multiple	Intervention	20	1.0 (-3.7, 5.7)	0.3 (-6.8, 7.4)	
		Control	15	0.7 (-4.7, 6.0)		
FACT-M TOI	Physical well-being: 0-19	Intervention	17	-0.7 (-4.7, 3.2)	0.4 (-4.8, 5.5)	0.51
		Control	26	-1.1 (-4.4, 2.2)		
	Physical well-being: 20-27	Intervention	58	3.7 (1.6, 5.8)	4.0 (1.0, 6.9)	
		Control	57	-0.3 (-2.3, 1.8)		
	Physical well-being: 28	Intervention	11	1.5 (-3.2, 6.2)	3.1 (-4.1, 10.3)	
		Control	11	-1.6 (-7.0, 3.8)		

Supplementary material 3 (continued). Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
CBI-B	Age: <65 years	Intervention	41	2.4 (-1.7, 6.5)	3.0 (-2.8, 8.8)	0.65
		Control	40	-0.6 (-4.7, 3.5)		
	Age: ≥65 years	Intervention	45	1.0 (-2.9, 4.9)	1.2 (-4.2, 6.5)	
		Control	54	-0.2 (-3.8, 3.5)		
CBI-B	Sex: Female	Intervention	32	3.7 (-1.0, 8.3)	3.8 (-2.0, 9.7)	0.50
		Control	56	-0.2 (-3.8, 3.4)		
	Sex: Male	Intervention	54	0.4 (-3.1, 4.0)	1.0 (-4.5, 6.6)	
		Control	38	-0.6 (-4.8, 3.6)		
CBI-B	Education level: Low (<11 years)	Intervention	8	8.9 (-0.5, 18.3)	9.6 (-2.2, 21.4)	0.43
		Control	14	-0.7 (-7.8, 6.4)		
	Education level: Medium (11-14 years)	Intervention	46	1.2 (-2.7, 5.1)	0.9 (-4.9, 6.7)	
		Control	36	0.3 (-4.0, 4.6)		
	Education level: High (>14 years)	Intervention	32	0.6 (-4.0, 5.2)	1.9 (-4.2, 8.0)	
		Control	43	-1.3 (-5.4, 2.7)		
CBI-B	Unemployed	Intervention	46	2.2 (-1.6, 6.1)	2.6 (-2.6, 7.8)	0.71
		Control	59	-0.4 (-3.9, 3.1)		
	Employed	Intervention	40	0.9 (-3.2, 5.1)	1.1 (-4.9, 7.1)	
		Control	35	-0.2 (-4.5, 4.2)		
CBI-B	Cohabitation: Single	Intervention	16	7.9 (1.5, 14.3)	4.3 (-4.1, 12.7)	0.64
		Control	23	3.6 (-1.9, 9.1)		
	Cohabitation: Partner	Intervention	70	0.3 (-2.8, 3.5)	2.0 (-2.4, 6.4)	
		Control	71	-1.7 (-4.8, 1.4)		
CBI-B	Comorbidity: None / one	Intervention	66	1.5 (-1.7, 4.7)	2.1 (-2.3, 6.5)	0.98
		Control	78	-0.6 (-3.6, 2.4)		
	Comorbidity: Multiple	Intervention	20	2.3 (-3.8, 8.3)	2.0 (-7.2, 11.2)	
		Control	15	0.3 (-6.7, 7.2)		
CBI-B	Physical well-being: 0-19	Intervention	17	-2.9 (-9.4, 3.6)	1.4 (-7.0, 9.9)	0.55
		Control	26	-4.3 (-9.7, 1.1)		
	Physical well-being: 20-27	Intervention	58	3.0 (-0.4, 6.5)	1.1 (-3.7, 5.9)	
		Control	57	2.0 (-1.4, 5.3)		
	Physical well-being: 28	Intervention	11	4.4 (-3.3, 12.2)	8.2 (-3.6, 20.1)	
		Control	11	-3.8 (-12.7, 5.1)		

Supplementary material 3 (continued). Effects for covariates (sex, age, education, employment, cohabitation, comorbidity, physical well-being) between the intervention group and control group.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
PEPPI	Age: <65 years	Intervention	41	3.7 (-1.0, 8.4)	0.5 (-6.1, 7.1)	0.31
		Control	40	3.2 (-1.5, 7.9)		
	Age: ≥65 years	Intervention	45	-2.6 (-7.1, 1.8)	-4.2 (-10.3, 1.9)	
		Control	54	1.5 (-2.6, 5.7)		
PEPPI	Sex: Female	Intervention	32	-1.4 (-6.7, 4.0)	-2.0 (-8.7, 4.7)	0.79
		Control	56	0.6 (-3.4, 4.7)		
	Sex: Male	Intervention	54	1.4 (-2.6, 5.5)	-3.2 (-9.5, 3.0)	
		Control	38	4.7 (-0.1, 9.4)		
PEPPI	Education level: Low (<11 years)	Intervention	8	-0.3 (-10.5, 9.9)	0.5 (-12.5, 13.6)	0.79
		Control	14	-0.8 (-9.0, 7.3)		
	Education level: Medium (11-14 years)	Intervention	46	-0.9 (-5.3, 3.6)	-3.5 (-10.2, 3.1)	
		Control	36	2.7 (-2.3, 7.6)		
	Education level: High (>14 years)	Intervention	32	2.3 (-3.0, 7.6)	-0.8 (-7.8, 6.3)	
		Control	43	3.1 (-1.6, 7.7)		
PEPPI	Unemployed	Intervention	46	-1.3 (-5.7, 3.1)	-3.4 (-9.3, 2.5)	0.50
		Control	59	2.1 (-1.9, 6.0)		
	Employed	Intervention	40	2.3 (-2.4, 7.0)	-0.3 (-7.2, 6.6)	
		Control	35	2.6 (-2.4, 7.6)		
PEPPI	Cohabitation: Single	Intervention	16	-1.3 (-8.8, 6.2)	-8.0 (-17.7, 1.8)	0.15
		Control	23	6.6 (0.4, 12.9)		
	Cohabitation: Partner	Intervention	70	0.9 (-2.6, 4.5)	0.1 (-4.9, 5.2)	
		Control	71	0.8 (-2.8, 4.4)		
PEPPI	Comorbidity: None / one	Intervention	66	2.2 (-1.5, 5.9)	0.0 (-5.0, 5.0)	0.12
		Control	78	2.2 (-1.2, 5.6)		
	Comorbidity: Multiple	Intervention	20	-5.6 (-12.4, 1.1)	-9.1 (-19.5, 1.3)	
		Control	15	3.5 (-4.4, 11.4)		
PEPPI	Physical well-being: 0-19	Intervention	17	2.0 (-5.6, 9.6)	5.3 (-4.6, 15.2)	0.23
		Control	26	-3.3 (-9.6, 3.0)		
	Physical well-being: 20-27	Intervention	58	0.0 (-4.0, 4.1)	-4.8 (-10.4, 0.9)	
		Control	57	4.8 (0.8, 8.7)		
	Physical well-being: 28	Intervention	11	1.4 (-7.7, 10.5)	0.5 (-13.4, 14.3)	
		Control	11	0.9 (-9.5, 11.3)		

Supplementary material 4. Results of multivariate linear mixed-model analyses expanded with covariates (sex) on PAM and FACT-G Total.

Scale	Covariate	Group	12 months, N	12 months, difference to baseline (95% CI)	12 months, effect of intervention (95% CI)	12 months, p value for equality of effects
PAM	Sex: Female	Intervention	32	7.5 (1.0, 14.0)	6.1 (-1.9, 14.1)	0.19
		Control	56	1.4 (-3.3, 6.0)		
	Sex: Male	Intervention	54	5.7 (1.1, 10.2)	-0.9 (-7.8, 6.0)	
		Control	38	6.5 (1.4, 11.7)		
FACT-G Total	Sex: Female	Intervention	32	6.9 (3.4, 10.3)	9.7 (5.3, 14.1)	0.0023
		Control	56	-2.8 (-5.5, -0.1)		
	Sex: Male	Intervention	54	0.8 (-1.9, 3.5)	0.3 (-3.8, 4.5)	
		Control	38	0.5 (-2.7, 3.7)		