

SUPPLEMENTARY DATA

Supplementary Table 1. Contents and treatment procedures in the DIAMOS and control groups

Session (90 min each)	DIAMOS	Control group
1	<ul style="list-style-type: none"> • Introduction/ group formation • Overview of contents • Analysis and definition of diabetes-specific/generic problems and distresses • Explanatory distress model: distresses versus resources <hr/> <p>After lesson task: Development of personal distress model in the DIAMOS booklet</p>	<ul style="list-style-type: none"> • Getting to know/ group formation • Diabetes education: carbohydrate estimation; bolus calculation; insulin injection; glycaemic goal setting; prevention of hypoglycaemic attacks/ketoacidosis
2	<ul style="list-style-type: none"> • Revision • Selection of main distresses • Introduction of problem solving versus emotional adaption • Diabetes-specific problem-solving interventions • Generic problem-solving interventions <hr/> <p>After lesson task: Transfer and recording of worked out personal strategies in the DIAMOS booklet</p>	<ul style="list-style-type: none"> • Diabetes education: diabetes long-term complications and collateral diseases, hypertension, metabolic syndrome, cardiovascular risk factors, smoking, alcohol, prevention of complications and adequate health care and control
3	<ul style="list-style-type: none"> • Revision • Introduction of functional versus dysfunctional beliefs/attitudes • Restructuring of diabetes-specific dysfunctional attitudes • Diabetes-related acceptance and commitment training <hr/> <p>After lesson task: Recording of developed functional attitudes in the DIAMOS booklet</p>	<ul style="list-style-type: none"> • Diabetes education: appropriate versus suboptimal foods/diet, dietary behavior and glycemic control, carbs, albumins, and fats, adipose tissue and insulin sensitivity, vitamins, cooking recommendations and recipes
4	<ul style="list-style-type: none"> • Revision • Activation of personal and social resources • Mindfulness training • Empowerment <hr/> <p>After lesson task: Recording of resources-related goals and ideas</p>	<ul style="list-style-type: none"> • Sports, exercise, and physical activity; dietary and insulin adaption to physical activity; cardiovascular training tasks
5	<ul style="list-style-type: none"> • Revision of main contents and results • Goal definition and agreement for following period • Motivational strategies • Prevention of relapse • Farewell <hr/> <p>After lesson task: Recording of personal goals and time frames in DIAMOS booklet</p>	<ul style="list-style-type: none"> • Social aspects of living with diabetes; work and driving law aspects; social support • Recommended reading, literature and online sources • Farewell

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Supplementary Table 2. Changes in primary and secondary outcomes from baseline to follow-up stratified by DM type

	DIAMOS (n=93)	Control (n=88)	Mean adjusted between groups baseline endpoint change (95% CI) ¹	Differences between DM types in mean adjusted between groups baseline endpoint change (95% CI) ¹	Interaction group x DM type
Primary Outcome – Depressive Symptoms (CES-D score)²					
CES-D score					
Type 1 DM	9.3 ±12.3	3.6 ±12.4	5.3 (3.0 to 7.6)	Δ 0.9 (-3.9 to 5.6)	.470
Type 2 DM	4.9 ±9.5	0.4 ±10.0	4.4 (1.1 to 7.8)		
Secondary Outcomes – Psychological Variables²					
PHQ-9 score					
Type 1 DM	4.3 ±5.8	1.6 ±5.8	2.3 (1.3 to 3.4)	Δ 0.2 (-1.9 to 2.3)	.624
Type 2 DM	2.0 ±3.7	0.2 ±5.2	2.1 (0.6 to 3.6)		
WHO-5 score					
Type 1 DM	-4.4 ±6.0	-3.2 ±6.3	-2.4 (-3.6 to -1.2)	Δ 2.8 (0.3 to 5.2)	.219
Type 2 DM	-4.6 ±6.3	-0.8 ±6.3	-5.2 (-7.0 to -3.5)		
DDS score					
Type 1 DM	0.7 ±1.0	0.4 ±0.7	0.4 (0.3 to 0.6)	Δ -0.2 (-0.5 to 0.1)	.089
Type 2 DM	0.7 ±1.0	0.3 ±0.8	0.6 (0.4 to 0.8)		
PAID score					
Type 1 DM	16.0 ±17.9	4.9 ±14.7	8.0 (4.5 to 11.5)	Δ -1.5 (-8.7 to 5.6)	.656
Type 2 DM	8.8 ±19.7	2.6 ±21.5	9.5 (4.4 to 14.6)		
EQ-5D score					
Type 1 DM	-0.00 ±0.21	0.00 ±0.20	-0.01 (-0.05 to 0.03)	Δ -0.01 (-0.10 to 0.08)	.861
Type 2 DM	-0.01 ±0.24	-0.02 ±0.29	0.00 (-0.06 to 0.07)		
AADQ score					
Type 1 DM	-1.6 ±6.9	-2.5 ±6.2	-1.1 (-2.4 to 0.2)	Δ 2.9 (0.2 to 5.6)	.010
Type 2 DM	-3.8 ±8.6	-0.8 ±7.3	-4.0 (-5.9 to -2.0)		
DTSQ score					
Type 1 DM	-3.6 ±8.4	-2.9 ±8.2	-2.4 (-3.9 to -1.0)	Δ 1.3 (-1.7 to 4.2)	.940
Type 2 DM	-2.2 ±9.2	-2.5 ±6.9	-3.7 (-5.8 to -1.6)		
SDSCA score					
Type 1 DM	0.1 ±1.1	0.1 ±1.0	0.0 (-0.2 to 0.2)	Δ 0.0 (-0.4 to 0.4)	.752
Type 2 DM	0.1 ±1.1	-0.1 ±1.2	0.0 (-0.3 to 0.3)		
Secondary Outcomes – Metabolic control²					
HbA1c (%)					
Type 1 DM	0.4 ±1.7	0.8 ±1.9	0.5 (0.2 to 0.9)	Δ -0.2 (-0.8 to 0.4)	.299
Type 2 DM	0.7 ±2.3	0.7 ±1.3	0.7 (0.3 to 1.2)		
Secondary Outcomes – Inflammatory marker³					
hs-CRP (mg/dl)					
Type 1 DM	-0.4 ±0.8	-0.2 ±0.8	-0.2 (-0.4 to 0.0)	Δ -0.2 (-0.6 to 0.2)	.123
Type 2 DM	-0.1 ±1.0	0.4 ±0.8	0.0 (-0.2 to 0.3)		
IL-6 (pg/ml)					
Type 1 DM	-0.0 ±0.7	-0.1 ±0.6	-0.1 (-0.2 to 0.1)	Δ -0.2 (-0.5 to 0.2)	.986
Type 2 DM	0.1 ±0.8	0.1 ±0.5	0.1 (-0.1 to 0.3)		
IL-1RA (pg/ml)					
Type 1 DM	0.1 ±0.3	0.1 ±0.4	0.2 (0.1 to 0.3)	Δ 0.0 (-0.2 to 0.2)	.428
Type 2 DM	0.4 ±0.5	0.4 ±0.6	0.2 (0.1 to 0.3)		
Adiponectin (ng/ml)					
Type 1 DM	-0.1 ±0.4	-0.1 ±0.3	-0.1 (-0.2 to -0.1)	Δ -0.2 (-0.4 to -0.1)	.423
Type 2 DM	-0.0 ±0.4	-0.0 ±0.3	0.1 (-0.0 to 0.2)		

¹ Values for between group differences in baseline-endpoint-changes and values for differences between DM types in between group baseline-endpoint-changes are adjusted for BMI, macrovascular complications, baseline CES-D, baseline PHQ-9 and baseline values.

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- ² Values for within group baseline-endpoint-changes (means \pm SEM) are adjusted for BMI, macrovascular complications, baseline CES-D, baseline PHQ-9 and baseline values.
- ³ Values for within group baseline-endpoint-changes for inflammatory markers (means \pm SEM) are adjusted for age, sex, BMI, diabetes duration, micro- and macrovascular complications, intake of medications (statins, anticoagulants, thyroid medication, cortisone, and non-steroidal anti-inflammatory drugs [NSAID]), baseline CES-D, baseline PHQ-9 and baseline values.