

## Outcome of a psychosocial health promotion intervention aimed at improving physical health and reducing alcohol use in patients with schizophrenia and psychotic disorders (MINT)

Article (Supplemental Material)

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Table 1. IMPaCT health promotion therapy in Sweden

<u>Module</u> <sup>1</sup>	<u>Individual or group meetings</u>
Module 1: Basic CBT in mental health	≤ 8
Module 2: Smoking	≤ 8
Module 3: Diabetes	≤ 8
Module 4: Healthy eating	≤ 8
Module 5: Alcohol	≤ 8
Module 6: Exercise	≤ 8

<sup>1</sup>Techniques from CBT, cognitive behavioral therapy and/or MI, Motivational interview were integrated in all modules

Table 2. Pre-baseline characteristics of patients in the intervention group (n= 119<sup>1</sup>) and the control group (n= 1020<sup>1</sup>)

		<i>Intervention group</i>	<i>Control group</i>	<i>p</i>
<b><i>Sociodemographic variables</i></b>				
Age (years)	Mean	46.5	46.8	0.799
Male sex	% (n)	50 (59)	55 (564)	0.236
Level of education (college or above)	% (n)	27 (31)	33 (304)	0.193
Patient's main psychiatric diagnosis <sup>2</sup>				0.010
Schizophrenia	% (n)	48 (53)	55 (508)	
Schizoaffective disorder	% (n)	17 (19)	11 (100)	
Delusional disorder	% (n)	13 (14)	6 (53)	
Psychosis (unspecified)	% (n)	7 (8)	13 (117)	
Bipolar disorder	% (n)	5 (5)	7 (63)	
Other disorder	% (n)	11 (12)	9 (86)	
<b><i>Cardiometabolic and lifestyle measures</i></b>				
Diagnosis of diabetes	n (%)	11 (12)	88 (10)	0.772
Smoker ("yes")	% (n)	39 (45)	42 (389)	0.561
Number of cigarettes <sup>3</sup>	M (SD)	19.8 (10.79)	19.6 (12.73)	0.947
Central obesity <sup>4</sup>	% (n)	77 (80)	65 (590)	0.013
<b><i>Self-reported health and quality of life</i></b>				
EQ5D VAS score	M (SD)	61 (19.9)	64 (20.3)	0.181
EQ5D index assessment	M (SD)	0.73 (0.219)	0.74 (0.250)	0.296
<b><i>Psychological functioning and severity of illness</i></b>				
Better current social, occupational, and psychological functioning <sup>5</sup>	% (n)	32 (33)	47 (422)	0.003
More severe illness <sup>6</sup>	% (n)	63 (66)	52 (456)	0.029

Abbreviations: EQ VAS, visual analog scale of the EuroQol five dimensions questionnaire; EQ5D, EuroQol five dimensions questionnaire; GAF, Global Assessment of Functioning scale; CGI, Clinical Global Impressions scale

<sup>1</sup> All patients included at pre-baseline. Sporadic missing values occur.

<sup>2</sup> According to DSM-IV.

<sup>3</sup> Only smokers: n<sub>MINT</sub>= 40 and n<sub>Controls</sub>= 351

<sup>4</sup> Waist circumference >94 cm for Europid men and >80 cm for Europid women in accordance with the International Diabetes Federation consensus definition of the metabolic syndrome.

<sup>5</sup> GAF score > 50. Scores are divided into numerical ranges (0, 1-10, 11-20, and so on, up to 91-100); lower scores indicate worse functioning and higher scores, better functioning.

<sup>6</sup> CGI severity of illness global subscale score >3. Scores range from 1-7; higher scores indicate more severe illness (1=normal, not at all ill; 2=borderline mentally ill; 3=mildly ill; 4=moderately ill; 5=markedly ill; 6=severely ill; 7=among the most extremely ill patients).

Table 3. Changes in the intervention group during the run-in period 6 months before the start of the intervention (n= 119<sup>5</sup>).

Variable	n	6 mo. before the start of the intervention		The start of the intervention		p	r <sup>6</sup>
		M	SD	M	SD		
<b>Cardiometabolic and lifestyle measures</b>							
Smoker (“yes”)	107	40%	49.3%	38%	48.8%	0.417	0.88
Number of cigarettes	38	19.8	10.62	18.9	11.38	0.538	0.71
Body mass index	100	30.7	6.27	30.3	6.20	0.013	0.97
Waist circumference in cm	95	105.5	16.00	103.3	16.07	0.002	0.91
Systolic blood pressure	98	129.9	16.46	126.4	14.70	0.034	0.45
Diastolic blood pressure	98	82.9	11.04	82.1	10.45	0.367	0.62
Pulse rate	96	79.9	14.23	76.9	14.07	0.008	0.71
Triglycerides	97	1.80	1.22	1.68	1.54	0.244	0.50
Cholesterol	97	5.43	0.97	5.35	0.99	0.431	0.74
HDL cholesterol	97	1.24	0.42	1.25	0.37	0.429	0.87
LDL cholesterol	90	3.44	0.86	3.39	0.85	0.473	0.73
Fasting serum glucose	93	5.93	2.23	6.12	2.46	0.053	0.79
Long-term blood glucose control (HbA1c)	97	40.6	10.70	40.3	13.41	0.029	0.77
Alcohol consumption (AUDIT)	108	3.3	3.71	3.1	3.55	0.317	0.59
<b>Self-reported health and quality of life</b>							
General health	105	2.48	1.01	2.24	0.84	0.004	0.61
EQ5D VAS score	104	60.8	20.32	63.5	17.82	0.083	0.65
EQ5D index	104	0.73	0.22	0.76	0.23	0.139	0.39
<b>Psychological functioning and severity of illness</b>							
Current social, occupational, and psychological functioning (GAF)	92	48.3	10.93	49.1	11.78	0.292	0.81
Severity of illness (CGI)	91	3.87	1.33	3.65	1.36	0.012	0.82

HDL, high-density lipoprotein; LDL, low-density lipoprotein; AUDIT, Alcohol Disorders Identification Test; EQ5D VAS, visual analog scale of the EuroQol five dimensions questionnaire; EQ5D, EuroQol five dimensions questionnaire; GAF, Global Assessment of Functioning scale; CGI, Clinical Global Impressions scale

<sup>5</sup> Sporadic missing values occur.

<sup>6</sup> Pearson’s product moment (parametric) or Kendall’s rank correlation (non-parametric) coefficient.



Table 4. Changes in cardiometabolic and lifestyle measures, self-reported health and quality of life, and psychological functioning and severity of illness in the intervention group (n= 88<sup>1</sup>) and control group (n= 570<sup>1</sup>) between the start and the end of the intervention (IMPACT therapy)

Variable	Intervention group				Control group				ANOVA		
	Measurement 1		Measurement 1		Measurement 1		Measurement 2		Group	Time	Time*Group
	M	SD	M	SD	M	SD	M	SD	p	p	p
<i>Cardiometabolic and lifestyle measures</i>											
Smoker %/n	37%	32	34%	29	39%	204	39%	205	0.568	0.254	0.203
Number of cigarettes <sup>2</sup>	16.8	11.2	13.2	12.1	17.5	13.6	17.5	13.2	0.422	0.672	See footnote 3
Body mass index	30.4	6.02	30.5	5.57	29.1	6.02	29.2	6.01	0.067	0.615	0.972
Waist circumference in cm	103.9	15.9	105.4	14.4	102.4	14.9	103.0	15.0	0.241	0.010	0.272
Systolic blood pressure	127	14.5	130	14.6	128	18.1	129	16.7	0.902	0.040	0.221
Diastolic blood pressure	83	10.3	82	10.0	83	11.7	83	11.3	0.517	0.742	0.690
Triglycerides	1.75	1.68	1.70	1.01	1.79	1.28	1.74	1.22	0.815	0.394	0.987
Cholesterol	5.40	1.00	5.39	1.04	5.45	1.18	5.37	1.18	0.925	0.420	0.527
HDL cholesterol	1.25	0.39	1.29	0.34	1.17	0.37	1.18	0.39	0.024	0.106	0.215
LDL lipoprotein cholesterol	3.45	0.84	3.41	0.90	3.50	0.98	3.43	0.99	0.742	0.237	0.717
Fasting serum glucose	6.26	2.63	5.93	1.73	5.77	1.59	5.77	1.63	0.090	0.054	0.053
ALT	0.45	0.266	0.44	0.262	0.57	0.445	0.56	0.432	0.008	0.569	0.974
ALP	1.11	0.330	1.12	0.352	1.17	0.368	1.18	0.367	0.143	0.497	0.956
GGT	0.40	0.500	0.37	0.567	0.62	0.858	0.50	0.761	0.042	0.058	0.245

***Self-reported health and quality of life***

General health	2.19	0.84	2.20	0.86	2.40	0.96	2.25	0.95	0.178	0.171	0.111
EQ5D VAS score	64.6	18.0	64.3	19.9	63.0	21.2	64.8	21.1	0.801	0.504	0.365
EQ5D index assessment	0.76	0.230	0.78	0.214	0.72	0.259	0.75	0.250	0.168	0.073	0.442

***Psychological functioning and severity of illness***

Current social, occupational, and psychological functioning (GAF)	48.8	10.5	50.6	11.1	52.0	12.6	52.0	13.1	0.102	0.148	0.120
Severity of illness (CGI)	3.56	1.35	3.61	1.35	3.59	1.26	3.61	1.16	0.925	0.577	0.832

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HDL, high-density lipoprotein; LDL, low-density lipoprotein; ALT, alanine aminotransferase; ALP, alkaline phosphatase; GGT, gamma-glutamyl transpeptidase; EQ5D VAS, visual analog scale of the EuroQol five dimensions questionnaire; EQ5D, EuroQol five dimensions questionnaire; GAF, Global Assessment of Functioning scale; CGI, Clinical Global Impressions scale

<sup>1</sup> Sporadic missing values occur.

<sup>2</sup> Smokers at baseline or follow-up, n<sub>Intervention</sub>= 33 (4 %) and n<sub>Control</sub>= 214 (40%), non-parametric statistics because of skewed distributions.

<sup>3</sup> Change for patients in the intervention group, p= 0.143; and for patients in the control group, p= 0.873 (Wilcoxon matched pairs test).