

P54. Personality factors predicting successful weight loss in polycystic ovary syndrome

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Context

Lifestyle intervention targeted at weight loss, can improve symptoms in women with Polycystic Ovary Syndrome (PCOS).

Objective

To investigate personality factors predicting successful weight loss following life style intervention in obese women with PCOS.

Methods

In a randomized controlled trial, patients were allocated to behavioral modification intervention or minimal intervention in a 1:1 ratio for comparisons after 4 months treatment. The minimal intervention group received behavioral modification intervention for a further 4 months. All patients were evaluated at 12 months in comparison to baseline.

Patients

68 women aged 18-40 years, with a BMI \geq 27 kg/m², fulfilling all 3 Rotterdam PCOS criteria were included.

Intervention

Behavioural modification intervention consisted of active lifestyle intervention with extensive support by a lifestyle coach and a dietician including weekly group workshops, and individual coaching sessions. Minimal intervention consisted of general healthy lifestyle recommendations given by a midwife including a pamphlet with written advice.

Main Outcome Measure

In this study we investigated personality factors predicting successful weight loss at 12 months for the study population. We used a personality assessment questionnaire, the Swedish Universities Scales of Personality (SSP), which was administered at baseline. SSP is based on 91 items, answers are grouped together and a T-score calculated for 13 personality scales.

Results

At 12 months, 14 of 47 women (30%) had achieved \geq 5% weight loss. The subgroup of women who had achieved \geq 5% weight loss had significantly lower personality trait scores for Physical Trait Aggression, 42.1 vs 49.7, $P = .025$, higher scores for Social Desirability, 56.5 vs 49.5, $P = .005$, lower scores for Embitterment 45.6 vs 54.3 $P = .019$ and lower scores for Detachment 42.7 vs 51.1 $P = .003$. There was no significant difference in scores between the two groups for the following personality traits: mistrust, trait irritability, verbal trait aggression, adventure seeking, impulsiveness, lack of assertiveness, stress susceptibility, psychic trait anxiety and somatic trait anxiety.

Conclusion

Despite extensive and time consuming efforts to achieve weight loss through life style change, the intervention only seems to be effective in a subgroup of the study participants. Taking personality factors into account could help guiding patients to the appropriate treatment type.

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