Can an early weight management program (WMP) prevent olanzapine (OLZ)-induced disturbances in body weight, blood glucose and lipid metabolism? Twenty-four- and 48-week results from a 6-month randomized trial.

This study was designed to investigate whether a preventive weight management program (WMP) reduces weight gain during olanzapine (OLZ) treatment. Moreover, we examined the effects of intervention on metabolic parameters. Patients (N = 100) with schizophrenia or schizoaffective disorder (DSM-IV) who had commenced treatment with OLZ were recruited. Following a run-in period of 4 weeks, 74 patients who had gained at least 1.5 kg body weight were randomized to receive either 12 bi-weekly WMP sessions (prevention group (PG), n = 36), or usual care (control group (CG), n = 38). Anthropometric and metabolic parameters were assessed after the 24-week intervention phase and a 24-week follow-up. Forty-two percent of 74 participants (PG: 36.1%, CG: 47.4%) finished the 24-week intervention phase while 34% of them (PG: 30.6%, CG: 36.8%) completed the 48-week study. There was no significant difference in weight gain between groups (PG: + 3.4 ± 4.2 kg vs. CG: + 4.5 ± 6.1 kg, P = 0.184) after 24 weeks. Nevertheless, PG showed a significantly smaller increase in waist circumference than CG (PG: + 4.6 ± 8.3 cm, CG: + 10.1 ±
7.3 cm, $P = 0.019$) after 48 weeks. Furthermore, PG showed a significantly smaller increase in fasting glucose ($P = 0.031$) and 2-h glucose after oral glucose load ($P = 0.018$) than CG. These results suggest that preventive WMP may reduce the risk of abdominal obesity and deterioration of glucose metabolism in OLZ-treated patients.