

COMPLIANCE OF HOSPITALIZED SCHIZOPHRENIC PATIENTS TO A 3-MONTH NUTRITION INTERVENTION PROGRAM FOR THE TREATMENT OF METABOLIC SYNDROME

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Abstract

Metabolic syndrome is a complex clinical entity that requires multiple treatment approaches. Numerous studies have shown that schizophrenic patients have inadequate dietary habits, which is a risk factor for metabolic syndrome development.

This study aimed to evaluate the compliance of hospitalized schizophrenic patients to a 3-month nutrition intervention program for the treatment of metabolic syndrome. The study sample consisted of 67 hospitalized schizophrenic patients with metabolic syndrome (aged 18 - 67), randomly allocated to the intervention group (Dietary approaches to stop hypertension - DASH diet with reduced calorie intake by 400 kcal/day, when compared to standard hospital diet, together with four nutrition lectures aimed to improve dietary habits; n = 33) or the control group (regular hospital diet that provided 2,200 - 2,400 kcal/day, together with the same nutrition educational program as for the intervention group; n = 34). During the intervention, dietary intake (food provided by the hospital and individually purchased) was assessed using three 24-hour dietary recalls. The computer software Program Prehrane 5.0 was used for the calculation of energy and nutrient intakes. Data analysis was performed using the statistical software Statistica v. 6.1. The data were analyzed using descriptive statistics. Difference in means was tested using t test.

Energy intake, together with the intake of total fat, saturated fatty acids, and sodium (all $p < 0.001$) was significantly higher, while the intake of fibre ($p=0.010$) was significantly lower in the intervention group, when compared to the prescribed DASH diet. Similarly, in the control group, the intake of energy, total fat, and saturated fatty acids (all $p < 0.001$) was significantly higher, and the intake of fiber ($p = 0.037$), iron ($p = 0.022$), and folic acid ($p = 0.014$) was significantly lower, when compared to the standard hospital diet. When comparing the two groups, the intervention group had significantly lower intake of energy, total fat, saturated fatty acids, trans fatty acids, cholesterol, and sodium (all $p < 0.001$), with significantly higher intake of fiber, potassium, magnesium (all $p < 0.001$), and many other micronutrients.

The results have revealed certain irregularities in complying with the respective intervention program and elucidated a need for further studies that would focus on identifying and correcting factors which lead to nonadherence.

Key words: Compliance, Nutrition, Schizophrenia, Metabolic syndrome.