**EPOSTER 11** 

## The Effectiveness of Physiotherapeutic Techniques on Stress Management Among Families of Children and Adolescents with Diabetes Mellitus Type 1

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**Background:** Diabetes Mellitus Type 1 (TD1) is an autoimmune disease and concerns most children and adolescents with diabetes. It disrupts family functioning and causes anxiety for both parents and children, affecting their physical and mental health.

**Purpose:** The purpose of this study is to evaluate the effectiveness of a physiotherapeutic stress management program in reducing stress symptoms.

**Methods:** This was a pilot, randomized controlled survey that was carried out in 3rd pediatric endocrinology clinic of Aristotle University at the Hippokrateion General Hospital of Thessaloniki. A total of 107 individuals, an intervention group of 26 children and 28 parents (n = 54) and a control group of 28 children and 25 parents (n = 53) participated. The questionnaires STAIC1,2 for children and DASS 21 for parents were used, to assess the quality of life and depression. The scores of hypoglycemic episodes of children were checked before and after intervention.

**Results:** After 12 weeks of intervention, the trait anxiety of children was reduced about 5.2 units and the state anxiety about 4.4. Also, it was observed a significant reduction in hypoglycemic episodes of the class 42%. The symptoms of depression, anxiety, and stress in parents of intervention group were significantly reduced about 2.94 units, 1.89, 2.14, respectively.

**Conclusions:** The physiotherapy program was associated with changes in physical and psychological symptoms of children and adolescents with TD1 and their parents. It turned out to have had a positive impact on depression and stress and a significant improvement on their quality of life.

Keywords: Diabetes Mellitus Type 1, Family, Children and Adolescents, Stress Management, Physiotherapeutic techniques.

