

A Comprehensive and Multidisciplinary Management Plan is Extremely Effective at Reducing the Prevalence of Overweight and Obesity in Childhood and Adolescence



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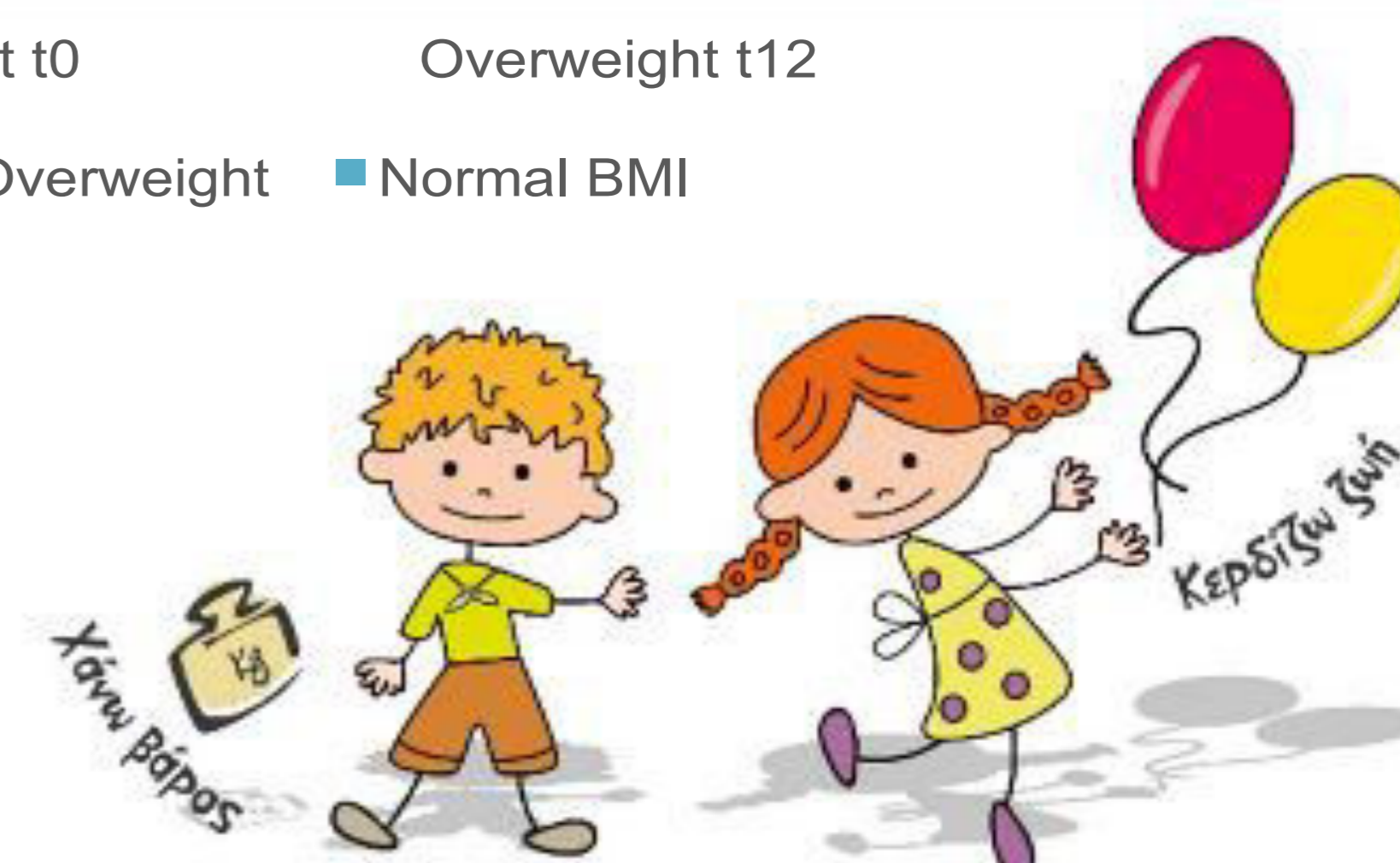
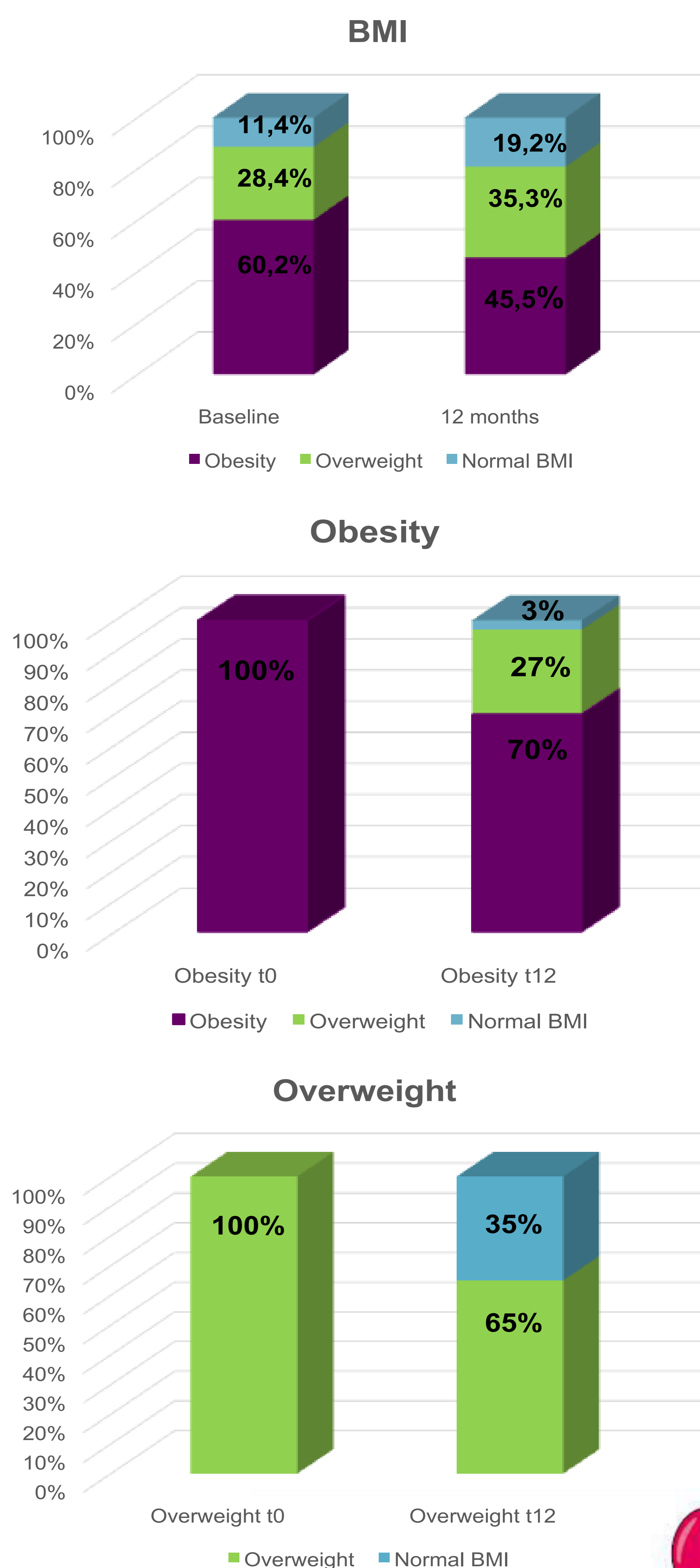
Background: Obesity in childhood and adolescence represents a major health problem of our century, and accounts for a significant increase in morbidity and mortality in adulthood. In Greece, more than 30-35% of children and adolescents are overweight or obese.

Objective and Hypotheses: To investigate the effectiveness of a comprehensive and personalized multidisciplinary management plan in reducing the prevalence of overweight and obesity in childhood and adolescence.

Patients and Methods: One thousand two hundred and seventy children and adolescents (mean age \pm SD: 10,06 \pm 3,29 yrs; 573 males, 697 females; 608 prepubertal, 508 pubertal) were studied prospectively for one year. According to their body mass index (BMI), subjects were classified as obese, overweight or of normal BMI. All subjects were evaluated by a multi-disciplinary team at frequent intervals, and received personalized advice on diet and exercise. Psychological assessment and management was included when required. Endocrinologic and biochemical investigations were performed at the beginning and at the end of the study. The study was approved by the Committee on the Ethics of Human Research, and written informed consent was obtained by all parents.

Results: At initial evaluation, 60,2% of subjects were obese, 28,4% overweight and 11,4% of normal BMI. A higher number of boys were obese compared with girls (68,5% vs. 53,3%, $P < 0.001$), while a higher number of girls were overweight (30,7% vs. 25,6%, $P < 0.001$). The onset of weight gain had been observed beyond the age of 5 years and was progressive throughout childhood and adolescence. Following one year of the multi-disciplinary management interventions, the prevalence of obesity was decreased by 30%, the prevalence of overweight was decreased by 35%, normal BMI increased by 8%, and the cardiometabolic indices improved substantially.

Conclusions: A personalized multi-disciplinary management plan is extremely effective at reducing the prevalence of obesity in childhood and adolescence.



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