

OBESITY AMONG GREEK ADOLESCENT GIRLS

Ioanna Leontaridou¹, Lydia Moutsiou¹, Paschalia K. Iliadou², Maria Somali¹, Anastasia-Konstantina Sakali³, Maria Papagianni⁴, George Mastorakos³, Dimitrios G. Goulis², Zadalla Mouslech^{1,5}

¹Department of Aesthetics and Cosmetology, Alexander Technological Educational Institute of Thessaloniki, Thessaloniki, Greece

²Unit of Reproductive Endocrinology, First Department of Obstetrics and Gynecology of Aristotle University of Thessaloniki, Papageorgiou Hospital, Thessaloniki, Greece

³Unit of Endocrinology, Diabetes Mellitus and Metabolism, Second Department of Obstetrics and Gynecology of National and Kapodistrian University of Athens, Aretaieio Hospital, Athens, Greece

⁴Unit of Pediatric Endocrinology, Third Department of Pediatrics of Aristotle University of Thessaloniki, Hippokraton Hospital, Thessaloniki, Greece

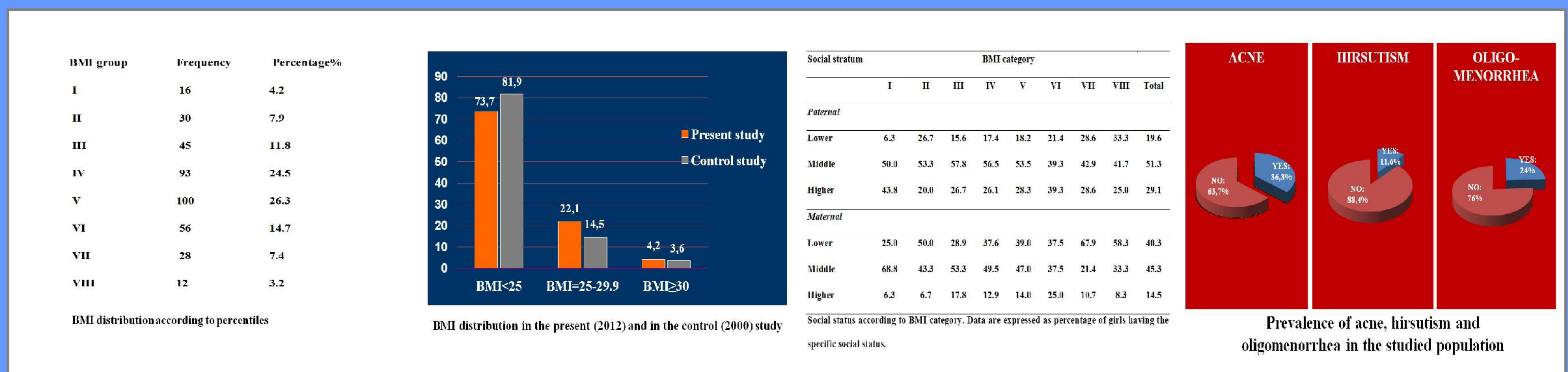
⁵First Propaedeutic Internal Medicine Department of Aristotle University of Thessaloniki, Ahepa Hospital, Thessaloniki, Greece

Objectives

To estimate the body mass index (BMI) distribution among Greek female adolescents in 2012 and to compare it with data from 2000, to find associations of obesity with dietary and social factors, as well as to determine the prevalence of acne, hirsutism and menstrual irregularities in the same population. Moreover, to inform the participants about the importance of following a healthy lifestyle and promptly consulting a physician about menstrual irregularities, acne and hirsutism.

Methods

All female students (n=380) aged 12-18 years of two randomly selected high schools from the city of Thessaloniki, after obtaining a written consent from their parents, underwent clinical evaluation and completed a questionnaire on their dietary habits, medical history and the social status (based on the educational and occupational level) of their parents. The BMI (kg/m²) of the students was calculated and categorized according to its percentile into 8 groups: I) < 3%, II) 3 – 9.99%, III) 10 – 24.99%, IV) 25 – 49.99%, V) 50 – 74.99%, VI) 75 – 89.99%, VII) 90 – 96.99%, VIII) ≥ 97%. International Obesity Task Force (IOTF) data was used to project each individual BMI to that at the age of 18 years. Data collected in 2000 from a group of 2300 Greek female adolescents from the city of Athens was used for comparison. A score of ≥8 according to the modified Ferriman-Gallwey scoring system was employed for the diagnosis of hirsutism. Diagnosis of acne was based on clinical examination and history. Statistical analysis of the sample characteristics was performed.



Results

The percentages of normal, overweight and obese adolescent girls were 73.7%, 22.1%, and 4.2% respectively. The corresponding results in the control group of adolescent girls in 2000 were 81.87%, 14.48% and 3.65% respectively. Overall, differences in the BMI distribution were not statistically significant between 2000 and 2012 (p=0.4341). There was no difference in specific meal consumption, in the number of daily meals and in the weekly amount of exercise among BMI categories. Higher BMI was associated with a mother of a lower social status (58.3% vs 41.6%, p=0.037). The prevalence of hirsutism and acne in the studied population was 11.6% and 36.3% respectively. Nineteen girls (5%) were diagnosed at the same time with acne and hirsutism. Eighty three of the 349 girls who had attained menarche (24%) were experiencing oligomenorrhea. No relationship was found between BMI and the prevalence of acne, hirsutism and oligomenorrhea.

Conclusions

Despite a slight increase, during the last decade, in the percentage of overweight and obese Greek adolescent girls, this trend was not statistically significant. Among the parameters studied, the only predictor of adolescent obesity was found to be the educational and occupational level of the mother.

References

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