

# THE INFLUENCE OF PARENT'S BMI, EDUCATIONAL LEVEL AND FAMILY STRUCTURE ON OBESITY PREVALENCE IN PREPUBERTAL-AGED CHILDREN.

A. Solntsava, L. Viazava, O. Зарпебаева

Belarusian State Medical University.

Lifestyle of the family seems to play an important role in the nutritional and behaviors choices of their children.

The aim of this study was to analyse the relationships between prepubertal-aged children's weight status, parents' educational level and other indicators of the socio-economic status of families in Belarus.

The children samples was selected from national research project "Childhood obesity" and consisted of 217 (129 males and 88 females) prepubertal-aged children. There were measured weight and height, and body mass index (BMI) were calculated and evaluated according to Belarusian population criteria. Parents' weight, height, educational level, family structure and number of children were collected by a self-administered questionnaire. Educational levels were classified as high medium and low. We examined 194 obese (BMI>95 percentile for age and sex) children (mean age  $7,9\pm 0,2$  years) and 23 normal weight (BMI<90 percentile for age and sex ) children (mean age  $4,9\pm 1,1$  years).

The prevalence of obese children increased along the parents' BMI category: from 22,8% for normal weight mothers to 34,1% for obese mothers ( $p=0,005$ ) and from 6,8% for normal weight fathers to 39,5% for obese fathers ( $<0,001$ ). An inverse relationship was observed between parents' educational level and child obesity, the lowest educational level conformed to highest prevalence of obese children: 91,9% for mothers with a low educational level compared to 85,8% for mothers with a high educational level ( $p<0,001$ ); similarly the corresponding prevalence for fathers was 95,0% to 84,4% ( $p=0,04$ ). The same relationship was noted between child obesity and family structure: 97,6 % in one-parent compared to 86,6% in two-parent families ( $p<0,001$ ). Child weight status was no related to number of children.

Parents' obesity, educational level and family structure, particularly the mother's, seem to have an effect on the prevalence of obesity in Belarusian children.

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