

INTERNAL MEDICINE II

ORAL PRESENTATIONS

82. IS DURATION OF SLEEP INFLUENCE THE OVERWEIGHT? INTERNATIONAL SURVEY!

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Introduction: Sleep is a basic need of the body. In Europe the duration of sleep for adult person (18-55 years) is 8 hours, but more than third of adult sleep less than 6 hours per night. Several studies have shown an epidemiological association between short sleep duration and high body mass index (BMI) Associated with obesity. In case when the sleep time is less than 5 hours at night, the risk of obesity increase by 60%. This impact is much greater than that of food take or lack of physical activity.

Purpose and objectives: We evaluate the correlation between the sleep duration and body mass index, depended of the sex and age.

Materials and methods: In study was included 111 persons, aged 18-28 years. Volunteers, medical students which was selected from 6 countries: Belgium, Germany, Moldova, USA and Romania. The international survey contains several parts: name, age, sex, anthropometric data (weight, height, BMI, waist circumference, sleep time (in hour), number of meals per day present of health problems and sport (min per day). In dependence of duration of sleeping participants were divided into two groups: group A with sleep duration ≤ 8 hours and group B with sleep duration > 8 hours. Statistical analysis was performed using standard Excel functions. Overweight was characterized by more than 25 kg/m squared, and obesity by more than 30.

Results: Young adults group included in the study have had a mean age of $21,19 \pm 2,17$ years. Group A have included 100 (90%) young adults with 44 (44%) men and 56 (66%) women, in group B 11 (10%) with 6 (55%) men and 5 (45%) women. In group A and B, the average age of men and women has been comparable, group A ($21,2 \pm 2,13$; $p > 0,05$) and group B ($21,2 \pm 2,6$; $p > 0,05$). The average sleep duration has been $6,57 \pm 1,26$ hours for group A and $9,45 \pm 0,68$ hours for group B. BMI among men who sleep less than 8 hours has been greater than in case of the optimal sleep than 9 hours ($25,81 \pm 4,8$ vs $23,04 \pm 4,65$; $p = 0,009$). The same difference it is observed at women ($24,19 \pm 1,2$) in group A (≤ 8 hours) vs ($19,9 \pm 1,90$) in group B (> 8 hours).

Conclusion: The anthropometric assessment of young adults group selected from 6 countries, allowed us to evaluate the correlation between duration of sleeping and body mass index. BMI was higher among men with sleep duration less than 8 hours.

Key words: sleeping, body mass index, short sleep duration, obesity.