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Carta al Editor

AUTHOR´S REPLY: A "PHYSICAL ACTIVITY LEVELS AND ENERGY EXPENDITURE IN URBAN SERBIAN ADOLESCENTS-A PRELIMINARY STUDY"

Dear Editor,

We read with interest the article by Pasic et al. on physical activity (PA) levels and energy expenditure in adolescence, published recently in *Nutrición Hospitalaria* (1). PA level among youth is one of the major lifestyle-related health determinants declining during adolescence. Although we agree with the findings and conclusions, we would like to present our own results regarding this issue.

A cross-sectional study organized in Pančevo (South Banat District, Serbia) involved 401 adolescents (191 boys and 210 girls, ranging 15-17 years of age) out of the general population of 6625 (around 5%). They were randomly sampled from five secondary schools and interviewed using the long form of the Serbian version of the International Physical Activity Questionnaire (IPAQ) (2). The questionnaire validity was first tested in adolescents (using the IPAQ procedure) and conspicuous correlations between PA reported in the questionnaire and pedometer measured PA were found (3). Scores for vigorous (adequate), moderate and walking activity were calculated in min/week, so was the sitting time.

Only about 19% of participants had vigorous PA, less than in other transition countries. About 20.2% of respondents were inactive, much lower than preschool children (according to their parents' subjective assessment) from another study in Serbia (4).

The most important predictors of PA among adolescents were gender, PA of father and hours of sedentary activities (PC and TV) (Table I).

Table I. Model of logistic regression-statistically significant variables

Variable	B*	Standard error	T	P value
PA of father	0.144	0.068	2.113	0.000
TV/hours	-0.257	0.066	-3.878	0.035
PC/hours	0.0095	0.037	-2.546	0.000
Gender (male#)	-0.615	0.096	-6.391	0.011

**Regression coefficient; #Reference category.*

Similar to the previous study (1), boys were more active than girls. The total level of PA among participants was almost 2,700 MET-min/week for boys and about 1,500 MET-min/week for girls. Girls preferred activities related to walking, while among boys intensive activity predominated. The boys and girls in the study differed statistically in all PA domains, except transport. The distribution of physical activity throughout domains considerably indicated lower physical activity in the domains of transport than in the domains of leisure-time and garden. Adolescents with a more sedentary lifestyle (PC, TV) had a lower level of total PA. Physical activity was not different according to nutritional status in either group of adolescents.

The results highlighted a need for PA increasing strategies in adolescents and interventions to reduce screen-time behavior and promote moderate-to-vigorous physical activity, especially at schools. Any type of familial support and parent role modeling reduced sedentary behavior (5).

Creation/maintenance of PA national guidelines is a vital part of public health policy in transition countries. Further studies of PA should investigate the differences in different socioeconomic characteristics.

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