

## WHO Childhood Obesity Surveillance Initiative (COSI) in Serbia in 2019: Monitoring obesity in young children

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### Abstract

The aim of the second national round of the Childhood Obesity Surveillance Initiative (COSI), a program of the World Health Organization (WHO) European Office, was to sustain the childhood obesity surveillance system launched in Serbia in the previous round in 2015. In 2015, 4857 first- and second- grade primary school children (age  $7.7 \pm 0.6$  years) were assessed for height, weight, and BMI. During the 2019 data collection round, 3179 first-to-third grade primary-school children (age  $8.5 \pm 0.8$  years) were assessed for basic anthropometric measures. Additional information on school nutrition and physical activity environment, as well as simple indicators of children's dietary intake and physical activity, were collected. The sample was stratified by region, district and level of urbanization. The WHO recommended cut-offs for school-age children and adolescents were used to compute and interpret body mass index for-age (BMI/A) Z-scores. The obesity prevalence reaches 17.3% and 11.7% in 6-9-year old boys and girls, respectively. Overweight (including obesity) rate is 5 percentage points higher in primary school boys (37.7%) in comparison to girls (33.2%). In comparison to the first round, the prevalence of obesity in boys increased by 2.6 percentage, while 2.1 percentage points increase in overweight prevalence was registered. During the same period, the prevalence of both overweight and obesity, increased by 5.5 percentage points in girls. The obtained data provide quality information on childhood obesity for policymakers, health professionals, and the general public, which makes the COSI program an efficient strategy in monitoring obesity trends in primary school children.

children. She has published several papers and been involved with relevant scientific projects.

### Speaker Publications:

1. Marković, Lidija & Djordjic, Visnja & Jorga, Jagoda & Bozic, Predrag & Milanovic, Ivana & Radisavljevic, Snezana & Batez, Maja & Ostojic, Sergej. (2017). Guidelines-focused education on diet and physical activity improves health promoting lifestyle profiles in Serbian adolescents and adults.
2. Marković, Lidija & Djordjic, Visnja & Tubić, Tatjana. (2017). Physical activity of Serbian urban and rural adolescent girls.
3. Djordjic, Visnja & Marković, Lidija. (2016). Oslobođanje učenika srednjih škola od nastave fizičkog vaspitanja [Medical Exemption From Physical Education in Secondary School Students]. *Sportske nauke i zdravlje [Sport Science and Health]*. 6. 114-119. 10.7251/SSH1602114M.
4. Marković, Lidija & Gušić, Marko & Maksimovic, Dragan & Marinkovic, Dragan. (2016). Adolescents athletes and non-athletes: do they differ in height, weight and BMI?.
5. Gušić, Marko & Molnar, Slavko & Smajić, Miroslav & Marković, Lidija & Maksimović, Dragan & Marinkovic, Dragan. (2016). Differences in anthropometric characteristics between children soccer players: today and eighteen years ago.

13<sup>th</sup> International Conference on Childhood Obesity and Nutrition; London, UK - March 16-17, 2020.

### Abstract Citation:

Jalali Markovic L, WHO Childhood Obesity Surveillance Initiative (COSI) in Serbia in 2019: monitoring obesity in young children, *Childhood Obesity 2020, 13<sup>th</sup> International Conference on Childhood Obesity and Nutrition; London, UK- March 16-17, 2020*

(<https://childhood-obesity.insightconferences.com/abstract/2020/who-childhood-obesity-surveillance-initiative-cosi-in-serbia-in-2019-monitoring-obesity-in-young-children>)



### Biography:

Lidija Marković is a PhD student at the Faculty of Sport and Physical Education in Novi Sad. She is employed at the same faculty as an assistant in the field of Sport and Physical Education sciences. Her professional orientation is focused on physical education, physical activity, and healthy lifestyle in