

NAZIV DISERTACIJE: Komparativna analiza pokazatelja rasta i posturalnog statusa sportista u periodu rane adolescencije

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SAŽETAK

Uvod: Broj adolescenata s posturalnim poremećajima i gojaznošću raste, što može rezultirati ozbiljnim problemima ukoliko se ne otklone na vrijeme. Prekomjerna tjelesna masa i pretilost u pubertetu mogu imati kratkoročne, ali i dugoročne zdravstvene posljedice. Fizička neaktivnost u tom periodu života dovodi do hipotrofije mišićne mase, smanjenog tonusa mišića, ograničene pokretljivosti u zglobovima, što uz nepravilno sjedenje, nepravilno držanje tijela pri hodu, pogoduje razvoju posturalnih deformiteta.

Ciljevi: Ciljevi studije su bili utvrditi antropometrijski status djece u periodu rane adolescencije koja se aktivno bave sportom, utvrditi prehrambene navike (unos proteina) djece u periodu rane adolescencije, ispitati učestalost treninga/organiziranih sportskih aktivnosti u sportskim klubovima, kao i učestalost rekreativnih sportskih aktivnosti, analizirati posturalni status djece u periodu rane adolescencije koja se aktivno bave sportom, analizirati indeks tjelesne mase (Body Mass Index - BMI) u odnosu na posturalni status djece u periodu rane adolescencije, te predložiti smjernice za pravilnu ishranu, kao i program preventivno-korektivnih vježbi za djecu u periodu rane adolescencije.

Materijal i metode: Studija je obuhvatila ukupno 120 ispitanika oba spola koji su ispunjavali kriterije za uključivanje u istraživanje. Istraživanje je provedeno u Privatnoj ordinaciji specijaliste fizijatra „Sporticus – dr. Buljugić“ u Sarajevu u periodu od januara 2021. godine do januara 2022. godine. Svi ispitanici muškog i ženskog spola koji su bili uključeni u našu studiju su bili anketirani na osnovu odabranih anketnih upitnika o prehrambenim navikama i učestalosti i vrsti sportskih i fizičkih aktivnosti, i to samo na početku istraživanja, dok su kompjuterska posturalna analiza i antropometrijska mjerenja rađeni i na početku i na kraju istraživanja.

Rezultati: Utvrđeno je da su skoro svi parametri kompjuterske posturalne analize kod djece u periodu rane adolescencije koja se aktivno bave sportom statistički značajno porasli nakon 12 mjeseci, dok su se vrijednosti Q ugla lijeve i desne noge statistički značajno smanjile nakon 12 mjeseci. Posturalni broj se kod skoro svih sportskih aktivnosti nakon 12 mjeseci povećao, osim kod fudbalera, kod kojih se posturalni broj statistički značajno smanjio nakon 12 mjeseci. Utvrđena je značajna pozitivna korelacija između posturalnog broja i indeksa tjelesne mase na prvom mjerenju u grupi karataša, dok je u grupi košarkaša utvrđena značajna pozitivna korelacija između posturalnog broja i indeksa tjelesne mase na drugom mjerenju.

Zaključak: Istraživanje je potvrdilo radne hipoteze, odnosno prvu radnu hipotezu koja je glasila da rast i razvoj djece u periodu rane adolescencije utiče na posturalni status (HR1) te je djelimično potvrdilo drugu i treću radnu hipotezu, tj. da određeni sport utiče na bolji posturalni status djece u periodu rane adolescencije (HR2), kao i da unos prehrambenih proteina utiče na proces rasta i bolji posturalni status djece u periodu rane adolescencije (HR3).

Ključne riječi: djeca u periodu rane adolescencije, sportske aktivnosti, posturalni status.

DISSERTATION TITLE:**Author:** Edin Buljugić**Mentor:** Prof. dr. Amra Mačak Hadžiomerović**Date of defence:** 16. Jun 2023.**DOI:** <https://doi.org/10.17532/DD.2023.08>**ABSTRACT**

Introduction: The number of adolescents with postural disorders and obesity is increasing, which can result in serious problems if they are not removed in time. Excessive body weight and obesity during puberty can have short-term as well as long-term health consequences. Physical inactivity during this period of life leads to hypotrophy of the musculature, reduced muscle tone, limited mobility in the joints, which in addition to improper sitting, improper body posture while walking, favors the development of postural deformities.

Objectives: The objectives of the study were to determine the anthropometric status of children in the period of early adolescence who are actively involved in sports, to determine the dietary habits (protein intake) of children in the period of early adolescence, to examine the frequency of training/organized sports activities in sports clubs, as well as the frequency of recreational sports activities, to analyze the postural status of children in the period of early adolescence who are actively involved in sports, to analyze the body mass index (Body Mass Index - BMI) in relation to the postural status of children in the period of early adolescence, and to propose guidelines for proper nutrition, as well as a program of preventive and corrective exercises for children in the period of early adolescence.

Material and methods: The study included a total of 120 respondents of both sexes who met the criteria for inclusion in the research. The research was conducted in the private practice of the physiatrist "Sporticus - Dr. Buljugić" in Sarajevo in the period from January 2021 to January 2022. All male and female respondents who were included in our study were surveyed on the basis of selected questionnaires about eating habits and the frequency and type of sports and physical activities, and only at the beginning of the research, while computer postural analysis and anthropometric measurements were made and at the beginning and at the end of the research.

Results: It was found that almost all parameters of computer postural analysis in children in the period of early adolescence who are actively involved in sports increased statistically significantly after 12 months, while the values of the Q angle of the left and right leg decreased statistically significantly after 12 months. The postural number increased in almost all sports activities after 12 months, except for soccer players, in whom the postural number decreased statistically significantly after 12 months. A significant positive correlation was found between the postural number and the body mass index at the first measurement in the group of karate players, while a significant positive correlation was found between the postural number and the body mass index at the second measurement in the group of basketball players.

Conclusion: The research confirmed the working hypotheses, i.e. the first working hypothesis, which stated that the growth and development of children in the period of early adolescence affects the postural status (HR1), and partially confirmed the second and third working hypotheses, i.e. that a certain sport affects a better postural status status of children in the period of early adolescence (HR2), as well as that the intake of dietary proteins affects the growth process and better postural status of children in the period of early adolescence (HR3).

Key words: children in early adolescence, sports activities, postural status.