

Djeca, vrijeme pred zaslonom i bežična radijacija

Međunarodna konferencija Reykjavik 24.02.2017.

Reykjavik Apel o bežičnim tehnologijama u školama

(Reykjavik Appeal on wireless technology in schools)

Mi, potpisnici, zabrinuti smo za zdravlje i razvoj djece u školama koje u podučavanju koriste bežičnu tehnologiju. Veliki broj znanstvenih studija ukazuje na značajne medicinske rizike uslijed dugotrajne izloženosti radio frekvencijskom zračenju (RFR) bežičnih uređaja i mreža i onda ako je to zračenje daleko ispod referentnih razina preporučenih od strane Međunarodne komisije za zaštitu od ne ionizirajućeg zračenja (ICNIRP).

Tražimo od vlasti preuzimanje odgovornosti za buduće zdravlje i dobrobit naše djece.

U svibnju 2011 je Međunarodna agencija za istraživanje raka (IARC), koja djeluje u sklopu Svjetske zdravstvene organizacije (WHO), klasificirala RFR u kancerogenu skupinu 2B, kao „mogući karcinogen za ljude“. Od tada je više znanstvenih istraživanja izloženosti RFR ljudi, životinja i bioloških materijala, osnažilo dokaze o povezanosti s većim rizikom za rak, posebno za tumore mozga. Nekoliko laboratorijskih istraživanja pokazalo je mehanističke učinke u karcinogenezi, kao što su oksidacijski stres, smanjenje regulacije mRNA te oštećenja jednostrukih lanaca DNA. IARC klasifikacija raka obuhvatila je sve izvore RFR.

Izloženost baznim stanicama mobilne telefonije, Wi-Fi pristupnim točkama, pametnim telefonima, prijenosnim računalima i tabletima može biti dugotrajna, ponekad i cjelodnevna, kako kod kuće tako i u školi. Kod djece taj rizik može biti naglašen i zbog kumulativnog učinka tijekom cijelog životnog vijeka. Stanice u razvoju kao i one nedovoljno zrele, mogu biti osjetljivije na izloženost RFR-u. Nije uspostavljena sigurna razina ovog zračenja, bazirana na znanstvenim istraživanjima, pa stoga ne možemo jamčiti sigurnost.

Osim rizika za rak, RFR može također izazvati otvaranje krvno-moždane barijere i dopuštanje ulaska otrovnih molekula u mozak, povredu neurona u hipokampusu (centru za pamćenje), snižavanje ili podizanje esencijalnih proteina uključenih u metabolizam mozga i reakcije na stres te utjecati na neurotransmitere. Kod spermatozoida izloženih djelovanju Wi-Fi, uočeno je više defekata glave kao i DNA oštećenja. RFR može povećati oksidativni stres u stanicama i dovesti do povećanja pro upalnih citokina i niže sposobnosti popravka prekida na jednostrukim i dvostrukim lancima DNA.

Osim toga, zapaženi su i kognitivni poremećaji u učenju i pamćenju. Rezultati OECD-ovih testova PISA u čitanju i matematici pokazuju trend nižih rezultata u zemljama koje su najviše uložile u uvođenje računala u školu. Izvršavanje više zadataka u isto vrijeme, previše sati ispred zaslona, manje vremena za društvene kontakte i fizičke aktivnosti, povećani rizik za bol u vratu i leđima, prekomjernu tjelesnu težinu, probleme sa spavanjem i ovisnost o informacijskoj tehnologiji, neki su od prepoznatih rizika i nuspojava povećanog korištenja IT tehnologija. Oni su u suprotnosti s često ponavljanim, ali u velikoj mjeri ne dokazanim tvrdnjama o mogućoj dobrobiti.

Tražimo od školskih vlasti u svim zemljama da steknu znanje o mogućim rizicima RFR-a za rast i razvoj djece. Podrška obrazovnim tehnologijama s žičanom mrežama sigurnija je od potencijalno opasnih izloženosti zračenju bežičnih tehnologija. Tražimo od vas da slijedite princip ALARA (As Low As Reasonably Achievable) i Rezoluciju 1815 Vijeća Europe o poduzimanju svih razumnih mjera kako bi se smanjila izloženost RFR-u.

Praktična pravila za škole za djecu i bežične tehnologije

- Nema bežičnih mreža u predškolskoj ustanovi, vrtiću i školama.
- U svakoj se učionici se preporučuju izravni žičani (kabelski) priključak za korištenje od strane nastavnika tijekom sata.
- Preferirati fiksne (žičane) telefone za osoblje u predškolskim ustanovama, jaslicama i školama.
- Preferirati žičani pristup internetu i žičane pisače. U školama treba isključiti Wi-Fi postavke na sveukupnoj opremi.
- Preferirati prijenosna računala i tablete koji se kabelom mogu povezati s internetom.
- Ne dopustiti učenicima korištenje mobitela u školama. Mogu ih ili ostaviti kod kuće ili ih isključene, nastavnici mogu pokupiti prije prvog sata.

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Dodatni potpisnici nakon održane konferencije

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