

Llamamiento de Reikiavik sobre la tecnología inalámbrica en las escuelas

Traducción al castellano de Pedro Belmonte Espejo para la PECCEM. Original en inglés: <http://www.stralskyddsstiftelsen.se/wp-content/uploads/2017/03/Reykjavik-Appeal-170224-2.pdf>

Nosotros, los abajo firmantes, manifestamos nuestra preocupación por la salud y el desarrollo de nuestros niños/as en las escuelas con la aplicación de la tecnología inalámbrica para la enseñanza. Una gran cantidad de estudios científicos evidencian considerables riesgos médicos debidos a la exposición a largo plazo a la radiación de radiofrecuencias (RFR) de redes y dispositivos inalámbricos; muy por debajo de los niveles de referencia recomendados por la Comisión Internacional de Protección contra las Radiaciones No Ionizantes (ICNIRP). Pedimos a las autoridades que asuman su responsabilidad por la salud y el bienestar futuros de nuestros niños y niñas.

En mayo de 2011, la Agencia Internacional para la Investigación del Cáncer (IARC) de la Organización Mundial de la Salud (OMS) clasificó la radiación de radiofrecuencias (RFR) como carcinógeno del Grupo 2B; es decir, "posiblemente" carcinógeno para los seres humanos. Desde entonces, más estudios científicos sobre la exposición a RFR en humanos, animales y material biológico han fortalecido su asociación a un mayor riesgo de cáncer, especialmente de tumores cerebrales. Varios estudios de laboratorio han demostrado efectos mecánicos en la carcinogénesis como el estrés oxidativo, la regulación a la baja del ARN mensajero y el daño al ADN con roturas de una sola cadena. La clasificación de cancerígeno por la IARC incluye todas las fuentes de RFR. La exposición procedente de estaciones base de telefonía móvil, puntos de acceso Wi-Fi, teléfonos inteligentes, ordenadores portátiles y tabletas puede ser a largo plazo, a veces en todo momento, tanto en casa como en la escuela. Para los niños/as este riesgo se puede acentuar debido al efecto acumulativo de su uso a lo largo del resto de su vida. Además, las células en desarrollo e inmaduras pueden ser más sensibles a la exposición a RFR. Ningún organismo de salud ha determinado ningún nivel seguro de esta radiación y, por lo tanto, no tenemos garantías de seguridad.

Además del riesgo de cáncer, las RFR también pueden afectar a la barrera hematoencefálica haciendo que se abra y permita la entrada de moléculas tóxicas en el cerebro, dañar neuronas del hipocampo (el centro cerebral de memoria), regular al alza o a la baja proteínas del cerebro esenciales para el metabolismo, la respuesta al estrés y la neuroprotección del cerebro y afectar a los neurotransmisores. Se han observado más defectos en la cabeza y daños en el ADN de los espermatozoides expuestos a Wi-Fi. Las RFR pueden incrementar el estrés oxidativo en las células y llevar a un aumento de las citoquinas¹ pro-inflamatorias y reducir la capacidad para reparar roturas de una sola fila y de doble fila en el ADN.

¹ Las citoquinas son un conjunto de proteínas que regulan interacciones de las células del sistema inmune.

También se han demostrado deficiencias cognitivas en el aprendizaje y la memoria. Los resultados de las encuestas de PISA de la OCDE en lectura y matemáticas muestran resultados decrecientes en los países que más han invertido en introducir computadoras en la escuela. Multitarea, demasiadas horas delante de la pantalla, menos tiempo para contactos sociales y actividades físicas, riesgo de dolores de cuello y espalda, sobrepeso, problemas de sueño y adicción a las tecnologías de la información y comunicación (TIC) son algunos de los riesgos conocidos y efectos secundarios de las TIC. Todos ellos en marcado contraste con los tan proclamados, pero en gran medida no probados, posibles beneficios.

Pedimos a las autoridades escolares de todos los países que adquieran conocimientos sobre los riesgos potenciales de las RFR para el crecimiento y desarrollo de los niños/as. La promoción de tecnologías educativas cableadas es una solución más segura que la potencialmente peligrosa exposición a la radiación inalámbrica. Les pedimos que sigan el principio ALARA (tan bajo como razonablemente sea posible) y la [Resolución 1815 del Consejo de Europa](#) para adoptar todas las medidas razonables para reducir la exposición a RFR.

Reglas prácticas para las escuelas con respecto a los niños/as y la tecnología inalámbrica:

- No debe haber redes inalámbricas en preescolar, guarderías y escuelas.
- Se recomienda una conexión directa por cable en cada aula para uso del profesor durante las clases.
- Dar preferencia a los teléfonos fijos para el personal de preescolar, guarderías y escuelas.
- Dar preferencia a la conexión por cable a Internet y a impresoras en las escuelas y desactivar la configuración Wi-Fi en todos los equipos.
- Dar preferencia a los ordenadores portátiles y tabletas que se pueden conectar por cable a Internet.
- No se debe permitir que los estudiantes usen teléfonos móviles en las escuelas. Pueden dejarlos en casa o que el profesor los recoja en modo apagado antes de la primera clase de la mañana.

Children, Screen time and Wireless Radiation – International Conference

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Appendix for further reading.

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