CATSalut y el Consell de Col·legis de Farmacèutics de Catalunya.

Conflicto de intereses

Ninguno.

Bibliografía

1. Gorostiza I, Elizondo E, Braceras L. Programa de cribado de VIH/sida en las oficinas de farmacia en la Comunidad Autónoma del País Vasco. Gac Sanit. 2013;27:164–6.
2. Sanders GD, Bayoumi AM, Sundaram V, et al. Cost effectiveness of screening for HIV in the era of highly antiretroviral therapy. N Engl J Med. 2005;352:570–85.
3. Fernández-López L, Rifà B, Pujol F, et al. Impact of the introductions of rapid HIV testing in the voluntary counselling and testing sites network of Catalonia, Spain. Int J STD&AIDS. 2010;21:388–91.

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The apparent ineffectiveness of bicycle helmets: A case of selective citation

La aparente ineficacia de los cascos de bicicleta: un caso de citación selectiva

Ms Director,

A recent Gaceta Sanitaria letter concluded bicycle helmet use should not be mandated in urban areas.[1] Mandatory helmet legislation (MHL) is controversial and a balanced presentation of all scientific evidence is therefore critical. This letter will briefly discuss relevant literature uncited by the authors.

The authors note bicycle use declines with MHL. However, there is ample evidence the contrary is possible. South Australian household surveys found similar cycling rates prior to and after MHL regardless of gender, age or level of urbanisation.[2] Adelaide cycling counts increased by 2.9% after MHL. Other surveys from Victoria, Australia[3] and Ontario, Canada[4] indicate either no change or an increase in cycling following MHL.

New South Wales surveys were commissioned around the 1991 MHL to estimate changes in helmet wearing.[5] These reports were designed to estimate helmet wearing and not cycling rates. No such surveys exist for NSW and conclusions using this data are therefore weak. However, this data forms the basis for the argument MHL leads to less cycling. Importantly, this data does not produce unequivocal results as Sydney adult cycling counts increased 22% following MHL.

Regarding the effects of MHL on urban cycling, the cycling mode share in Australian cities changed little after MHL from 1.14% in 1986 to 1.13% in 1991 after most Australians were subjected to MHL.

The above examples of non-decreasing cycling rates following MHL have important health implications. The de Jong paper, cited by Rojas-Rueda et al., assumes cycling rates only decline with MHL. However, as evidenced above, this does not hold uniformly. Importantly, for non-decreasing cycling rates, this model always estimates a benefit to MHL.

A New Zealand evaluation by Clarke and cited by Rojas-Rueda et al. ignores critical analyses found in the original source material.[6] This research demonstrates serious traumatic brain injury rates per million hours spent cycling declined significantly following MHL. Clarke only considered all cycling injuries and, since helmets are designed to protect the head only, his analysis could mask any positive impact of MHL.

The manuscript mentions Australian research demonstrating a benefit of MHL, yet cites a rejoinder critical of this work. Missing from the letter was a full-length response to the rejoinder demonstrating the criticisms were unfounded and the original analysis was rigorous and robust.[7] Briefly, the original study estimated a 29% decline in bicycle related head injury hospitalisations attributable to MHL compared with limb injuries. There was a concurrent helmet wearing increase from about 25% to 80%. Note the rejoinder self-cites a paper retracted due to numerous arithmetic errors.[8]

There is strong evidence helmet wearing, either voluntarily or compulsory, mitigates the risk of bicycle related head injury. Of note, head injury is the most common cause of cycling-related hospitalisation in Catalonia.[9] Helmets, however, should not be viewed as a panacea and instead are an important part of any cycling safety strategy along with segregated cycling facilities and lower speed limits for motorised traffic. The benefits of each intervention are situational – helmets will help a cyclist in an accident and segregated cycling infrastructure will help avoid accidents. I therefore believe the decision to mandate helmet use should be in conjunction with a comprehensive strategy and not in isolation.

Bibliografía

1. Rojas-Rueda D, Cole-Hunter T, Nieuwenhuijsen M. Ley para el uso obligatorio de casco por ciclistas en zonas urbanas. ¿Es bueno para la salud pública? Gac Sanit. 2013;27:282–5.
2. Marshall J, White M. Evaluation of the compulsory helmet wearing legislation for bicyclists in South Australia. Walkerville, SA: South Australian Department of Transport; 1994. Office of Road Safety Report Series 8/94 [consulted on 9/9/2013]. Available at: http://www.bicyclenetwork.com.au/media/vanilla/file/SA%20Helmet%20eval%201994%20SA%20Marshall.pdf
3. Finch C, Heiman L, Neiger D. Bicycle Use and Helmet Wearing Rates in Melbourne, 1987 to 1992: the influence of the helmet wearing law. Melbourne: Monash University Accident Research Centre; 1993 [consulted 9/9/2013]. Available at: http://www.monash.edu.au/miri/research/reports/muarc045.pdf
4. Macpherson AK, Parkin PC, To TM. Mandatory helmet legislation and children's exposure to cycling. Inj Prev. 2001;7:228–30.
5. Smith NC, Milthorpe FW. An Observational Survey of Law Compliance and Helmet Wearing by Bicyclists in New South Wales - 1993. Rosebery, NSW: NSW Roads and Traffic Authority; 1993 [consulted on 9/9/2013]. Available at: http://bicycleinfo.nsw.gov.au/tools_and_resources/cycling_research.html
6. Tin Tin S, Woodward A, Ameratunga S. Injuries to pedal cyclists on New Zealand roads, 1988-2007. BMC Public Health. 2010;10:655.
7. Walter SR, Olivier J, Churches T, Grzebieta R. The impact of compulsory helmet legislation on cyclist head injuries in New South Wales, Australia: A response. Acc Anal Prev. 2013;52:204–9.

8. Grzebieta R. Retraction of the Voukelatos and Rissel paper on bicycle helmet legislation and injury. J Australas Coll Road Safety. 2011;22:39.
9. Suelves JM, Cabezas C. Bicicleta y salud: el casco no es el problema, sino parte de la solución. Gac Sanit. 2013;27:564.

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Flúor en aguas de consumo público españolas y prevención de la caries dental

Fluoride content in tap water in Spain and prevention of dental caries

Sra. Directora:

La fluoración artificial del agua de consumo público ha sido la medida más eficiente para la profilaxis colectiva de la caries dental. En la actualidad, la concentración de flúor recomendada en las aguas de consumo público es de 0,7 mg/l[1], frente a los 0,7-1,2 mg/l recomendados en 1962. Este cambio se basa en que el flúor contenido en el agua de consumo público se incorpora también a los alimentos en el curso de su elaboración, aumentando el riesgo de fluorosis dental, y a que la principal acción preventiva del flúor es posteruptiva. No obstante, se sigue aceptando que la fluoración del agua es la mejor medida de salud pública si hay una alta prevalencia de caries dental. Sin embargo, en las poblaciones con baja prevalencia de caries, como ocurre actualmente en España, la fluoración del agua de consumo público no es la única opción. La identificación de un alto riesgo de caries individual en los menores aconseja la utilización de suplementos orales de flúor, pero su correcta indicación exige conocer la concentración de flúor en el agua que consumen de manera cotidiana.

Se aportan los resultados del análisis de flúor por cromatografía iónica en el agua de consumo público de 110 ciudades españolas en el año 2012, donde residen 21.387.496 personas (45,2% de la población española).

La concentración media de flúor hallada es de 0,25 ± 0,23 mg/l (0,01-1,34 mg/l). El agua del 95% de las ciudades estudiadas contiene menos de 0,7 mg/l y hay 18 localidades cuyas aguas contienen entre 0,3 y 0,7 mg/l (fig. 1). Sólo en cinco poblaciones la concentración es superior a 0,7 mg/l: Vitoria y San Sebastián por fluoración artificial, San Cristóbal de La Laguna (Tenerife) por fluoración natural conocida, y Eivissa y León contienen más de 1 mg/l.

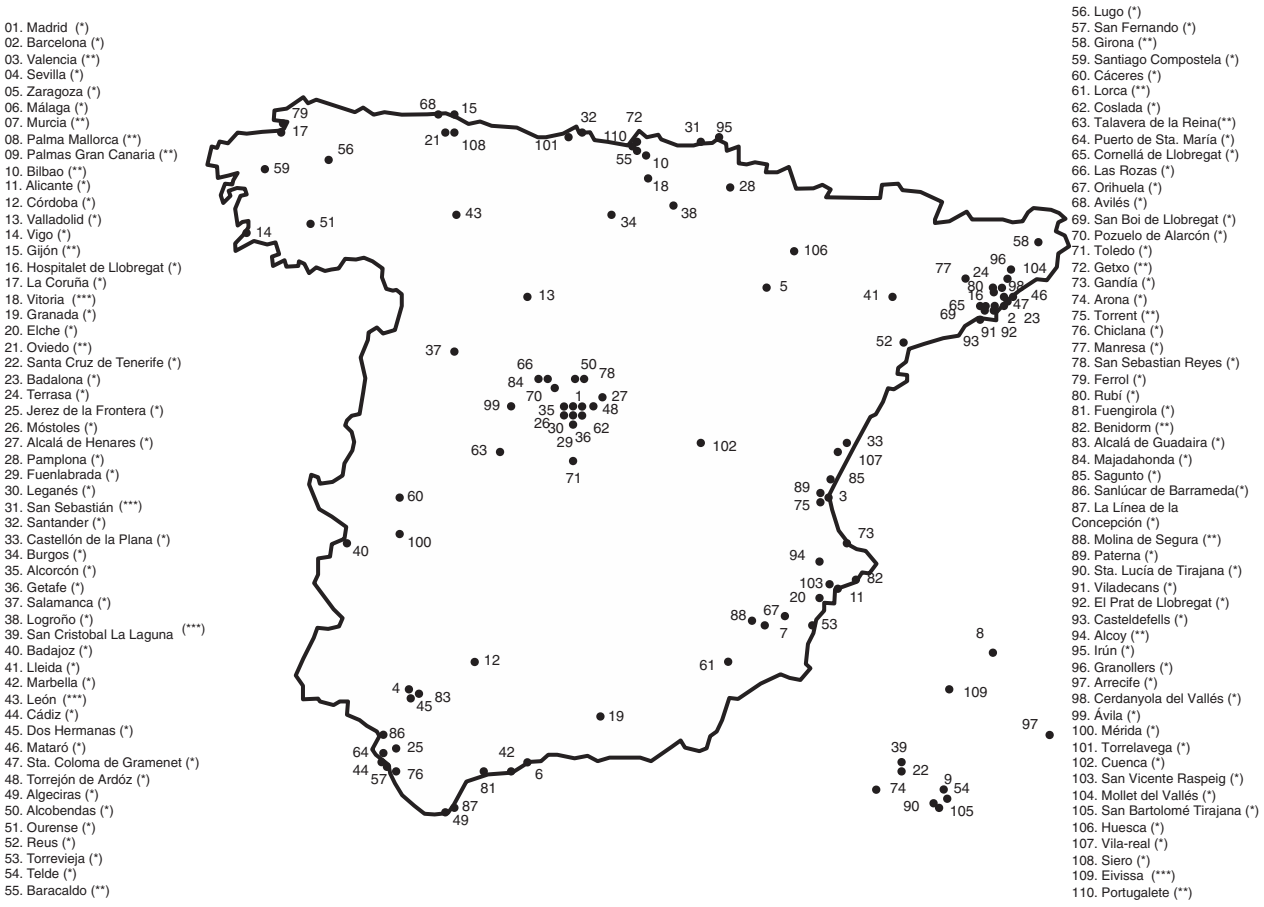

Figura 1. Poblaciones españolas en las que se ha determinado el contenido en flúor de las aguas de consumo público. Concentración media de flúor entre paréntesis (*): <0,3 mg/l; (**): 0,3-0,7 mg/l; (***): >0,7 mg/l.