

deberse a que la mayoría se ven obligados a dormir de día, que es cuando se produce en el cuerpo de forma natural la mayor parte de la vitamina D (90%) por exposición de la piel a la radiación ultravioleta de la luz solar. Otros factores que influyen en menor medida son los hábitos dietéticos, el sexo y el ejercicio físico<sup>4</sup>.

Además, hay que tener en cuenta que concentraciones más altas de vitamina D se asocian con un menor riesgo de distintos tipos de tumores, como el cáncer de mama, de próstata y de colon<sup>5</sup>.

En España, actualmente, la vigilancia de la salud individual de las personas trabajadoras con horarios a turnos se lleva a cabo mediante la realización de exámenes de salud, basados en los 20 protocolos de vigilancia sanitaria específica, aprobados por el Consejo Interterritorial del Sistema Nacional de Salud<sup>6</sup>.

En el contenido de cada uno de estos protocolos se contempla un apartado de control biológico para determinar diversos parámetros en sangre, entre los que se encuentran algunas vitaminas, como la B<sub>12</sub>, pero no está incluido en ninguno de ellos el valor de la concentración de 25-hidroxivitamina D.

La única información que actualmente tiene el especialista en medicina del trabajo sobre los posibles valores de vitamina D en los/las trabajadores/as que realizan trabajos a turnos son los datos recogidos sobre el consumo de fármacos y hábitos dietéticos en el examen de salud laboral, valorando el tipo de dieta y el consumo de ciertos complementos alimenticios de forma habitual.

Por lo tanto, la determinación de la concentración de 25-hidroxivitamina D en la sangre, en las analíticas de los exámenes de salud laboral de los/las trabajadores/as que realizan trabajos a turnos, podría aportar una información muy valiosa a los especialistas en medicina del trabajo para las actividades de vigilancia y control del cáncer en el ámbito laboral.

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J. González es el único autor de la carta.

#### Conflicto de intereses

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#### Opinions on a car smoking ban: a needed guide for public health decision-makers

##### Opiniones sobre la prohibición de fumar en el coche: la guía necesaria para la toma de decisiones de salud pública

To the editor:

About half of the children worldwide are exposed second-hand smoke (SHS) at home.<sup>1</sup> Additionally, children are also exposed to SHS inside the vehicles in which they are usually carried, where smoking use results in high levels of SHS concentration.<sup>2</sup> The largest study conducted in Portugal about children exposure at SHS in the car revealed that 28.9% of children had been daily or occasionally exposed to tobacco smoke inside cars.<sup>3</sup>

SHS exposure among children is associated with the development of respiratory infections and chronic symptoms such as cough, impaired lung growth and function, wheezing or dyspnea.<sup>1</sup> Beyond the risks for children's health, evidence support the fact that children who live in a microsocial environment where tobacco use is a common behavior have an increased risk of becoming smokers.<sup>2</sup> Also, on a different perspective, smoking while driving represents an increased risk of traffic accidents.

Laws banning smoking in cars carrying children have been introduced in a number of jurisdictions in the United States, Australia and Canada, and others, as the United Kingdom, will introduce a

similar law in the near future. South Africa and Bahrain have bans on smoking in cars with children, while Mauritius has banned smoking in all cars carrying any passenger.<sup>4</sup> Understanding the public opinion about the implementation of new policies is a needful guide for public health decision-makers.

Taking into account the lack of information on this important matter in Portugal, a study aiming to describe the level of agreement with a car smoking ban was developed. It consisted in a cross-sectional study with telephone interviews (based on the protocol of López et al.)<sup>5</sup>, conducted between May 2013 and October 2014, with a random and representative sample of the population of three Portuguese cities: Barcelos (Bar), Braga (Br) and Lisbon (Lx). The sample consisted of 129 individuals in Br (67 women), 85 in Bar (44 women) and 146 in Lx (74 women), proportional in city size, sex and age group. Overall, 360 individuals, aged between 15–74 years, were asked about their level of agreement on a nation-wide ban on smoking in cars—with and without children. Descriptive analysis was performed.

The majority of the participants supported a smoking ban in cars with children (85% Bar; Br 93%, 88% Lx). Non-smokers were more likely to support this policy (90% Bar, 100% Br, 90% Lx) than smokers (80% Bar, 76% Br, 77% Lx). **Table 1** presents the agreement with a smoking ban in cars, with and without children, by city and smoking status of the respondents.

A large public support to ban smoking in cars carrying children was shown. Raising awareness among parents and educators about the health consequences of tobacco use inside the car and

**Table 1**

Agreement with a smoking ban in cars, with and without children, by city and smoking status of the respondents.

	N	Agreement with a smoking ban in cars	
		With children n (%)	Without children n (%)
<i>Non-smoker</i>			
Barcelos	77	69 (89.6)	68 (88.3)
Braga	91	91 (100.0)	82 (90.1)
Lisboa	115	103 (90.4)	63 (54.8)
<i>Smoker</i>			
Barcelos	8	6 (75.0)	5 (62.5)
Braga	38	29 (76.3)	13 (34.2)
Lisboa	31	24 (77.4)	8 (25.8)

encouraging them not to smoke indoors is an urgent need to promote smoke-free cars. Mainly, a ban on smoking inside cars would have immediate impacts on children's health protection. Results from this study strengthens the call for policy-makers to implement strategies to protect this fragile group, starting by banning tobacco use inside vehicles while carrying children.

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### Statement of authorship

The study was designed by J. Precioso, F. Reis and J. Machado. J. Precioso and L. Dias wrote the first draft of the manuscript. I. Sousa and C. Sousa collected the data. J. Precioso and J. Machado designed and carried out statistical analysis. All authors gave a substantial contribution to the interpretation of data, critical discussion and revision of the manuscript, and approved its final version.

### Conflicts of Interest

None.

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